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Embellished with a portrait of Abbe Chappe.

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LIFE OF THE ABBE CHAPPE.

WITH AN ELEGANT HEAD.

JOHN Chappe d'Auteroche was born at Mauriac, a town in Upper Auvergne, on the 23d of May, 1728, of John Chappe, lord of the barony of Auteroche, and Magdalen de la Farge, daughter of Peter de la Farge, lord of la Pierre, and major in the regiment of Royal Carabiners.

Young Chappe, from the moment of his birth, enjoyed the valuable advantage of not being under the neceſſity of ſtruggling like many men of genius, with adverſity and penury, which, too often, fall to the lot of merit, and by obſcuring the moſt brilliant talents, check their efforts, and retard their advancement. The diſtinguiſhed rank which his parents held in their province, added to their wealth and opulence, enabled them to beſtow upon their ſon an excellent education, the foundation of which was laid at Mauriac, where he began his ſtudies. Having made conſiderable progreſs here, he went, afterwards, to finiſh them at the college de Louis le Grand, as the celebrity of its profeſſors, at that time, ſeemed to promiſe him the happieſt ſucceſs, and his hopes, indeed, were not diſappointed.

Young Chappe, from his earlieſt infancy, ſhewed a wonderful turn for drawing and the mathematics. Deſcartes was ſcarcely eight years of age when he was ſtyled a philoſopher; young Chappe, in the like manner, might have been honoured with the title of a mathematician. An irreſiſtible impulſe, and ſingular diſpoſition, as if innate, led him to draw plans, and made calculations; but theſe purſuits, quite foreign to the ſtudies in which he was then engaged, occupied no part of that time which was allotted for them. He applied to the former only at thoſe moments which the regulations of the college ſuffered him to call his own.

Genius, which is always active, made the Abbe Chappe diſcover, in the ſilence and ſolitude of the cloiſter, reſources which he little expected. During his courſe of philoſophy, he formed an acquaintance with a Carthuſian, named Dom Germain, from whom he learned the elements of mathematics and of aſtronomy. In theſe two ſciences he made a rapid progreſs; for the zeal of the maſter was well ſeconded by the diligence of the ſcholar, who followed his literary purſuits with the ſame ardour and enthuſiaſm, as the generality of young men follow diſſipation and pleaſure.

So ſingular a phenomenon could not long remain unknown. Father de la Tour, then principal of the college, being ſtruck with young La Chappe, mentioned him to Mr. Caſſini, and ſpoke of the progreſs he had made in ſuch high terms, that the latter became very deſirous to ſee ſome of his works. After cauſing him to make a few trials in his preſence, that celebrated academician could not help admiring his happy diſpoſition; but he did not confine himſelf to praiſe only. Being a warm patron and protector of merit, becauſe he poſſeſſed a great deal himſelf, he that moment reſolved to cultivate young Chappe's talents, and to endeavour to render them uſeful to ſociety. With this view, he employed him in taking plans of ſeveral of the royal buildings, and made him aſſiſt in delineating the general map of France.

The Abbe Chappe, however, made himſelf known in the aſtronomical world, by a work of much greater importance. The vaſt genius of Halley, embracing the celeſtial univerſe, had comprehended the whole ſyſtem and harmony of the ſtars. Futurity had diſplayed itſelf before the eyes of this great man; and, in his aſtronomical tables, he had traced out the path in which the planets were to purſue their courſes; calculated their eclipſes; and, by an ingenious application of his theory to the

parallaxes of Venus and the ſun, had been able to announce that the tranſit of the former over the ſun's diſk would furniſh the means of determining the diſtance of that luminary from the earth. Theſe tables, the reſult of repeated obſervations, and of laborious application, were to many people as dark and obſcure as the reſponſes of the ancient oracles; beſides, as they were publiſhed in Engliſh, they were loſt to a great part of Europe, though abſolutely neceſſary for thoſe who wiſhed to devote their attention to the ſtudy of the heavens. The Abbe Chappe, therefore, undertook to remedy this deficiency; and, by tranſlating Halley's work, he rendered an eſſential ſervice to his countrymen. This tranſlation appeared in 1752; and the additions which the tranſlator made, and the new inductions which he drew from the labours of the Engliſh aſtronomer, placed him almoſt on a level with the author.

The Abbe Chappe had now given too ſtriking a ſpecimen of his talents not to attract the notice of Government. The king having ordered plans of ſeveral places in the county of Bitche, in Lorraine, to be taken, and the foreſt in the neighbourhood of the town of the ſame name, to be ſurveyed, the Abbe Chappe's merit procured him the ſuperintendance and direction of this buſineſs; and the event ſhewed, that the miniſtry could not have choſen a perſon more deſerving of their confidence. Men of ordinary abilities take advantage of proper occaſions; but the man of genius alone knows how to create them. The Abbe Chappe, in the midſt of foreſts, under a cloudy and unfavourable ſky, without inſtruments, and without obſervatory, encountered difficulties which might have diſcouraged any other perſon: but they ſerved only to augment his ardor. In a neighbouring court, celebrated for patronizing the fine arts, he found every inſtrument which he had occaſion for, and in unſhaken conſtancy, reſources that enabled him to ſurmount every obſtacle. Employed, during the day, in executing thoſe plans which he was commiſſioned to take, he devoted the night to aſtronomical obſervations, which were attended with more ſucceſs than he could well have hoped for; and which ſerved to clear up a very important point in geography, by determining the real poſition of the the town of Bitche, a kind of problem that had never before been reſolved.

On his return from this expedition, he was choſen a member of the Royal Academy of Sciences; and on the 17th of January, 1759, he obtained the place of aſſiſtant aſtronomer, vacant

by the promotion of Mr. De la Lande to that of aſſociate. This reward, ſo juſtly merited, and the only one which he aſpired at, was the more flattering, as it introduced him to the acquaintance of all the learned men who compoſed that illuſtrious body.

The two comets which appeared in 1760 gave the Abbe an opportunity of ſhewing that he was not unworthy of the honour conferred on him; he obſerved them both with the greateſt aſſiduity and attention, and the reſult of his obſervations was publiſhed in the memoirs of that year, with reflections on the zodiacal light, and an aurora borealis, which appeared about the ſame period.

As the tranſit of Venus, over the ſun's diſk, which Halley announced would take place on the 6th of June, 1761, ſeemed to promiſe great advantage to aſtronomy, it very much excited the curioſity of the learned throughout all Europe. It was neceſſary, however, in order to derive benefit from it, that it ſhould be obſerved in ſome very remote places; and as Tobolſk, the capital of Siberia, and the iſland of Roderigo, in the Eaſt Indies, were thought to be the propereſt, the difficulty was to find aſtronomers bold enough to tranſport themſelves thither. But what will not the love of ſcience prompt men to do? Mr. Pinge offered to go to the iſland of Roderigo, and Tobolſk remained to Abbe Chappe, who, had the matter been left to himſelf, would have made no other choice. Mr. Fouchy, the author of the Abbe's eloge, ſays, "The one went to encounter the ardours of the torrid zone, and the other to traverſe the ice of a region more truly hyperborean than thoſe which the ancients diſtinguiſhed by that name."

The Abbe having received his majeſty's order, and recommendations from the learned body of which he was a member, ſet out for the place of his deſtination in the month of November, 1760. In the courſe of his journey, he experienced all thoſe fatigues and dangers which were to be expected in ſo advanced a ſeaſon; and, on account of the war which then prevailed, he was obliged to travel by the way of Vienna and Poland. At theſe two courts, he received the moſt flattering reception, from the Count de Choiſeul and the Marquis de Paulmi, both equally diſtinguiſhed by their zeal for the welfare of their country, and for the advancement of ſcience.

After reſiding a ſhort time at Vienna and Warſaw, during which he had the honour of being preſented to their Imperial Majeſties and the King of Poland, the Abbe ſet out for Peterſburgh, where he arrived on the 13th of February, after many

diſagreeable accidents. A more inſurmountable obſtacle, however, which he had not thought of, awaited him in the capital, and he found himſelf on the point of loſing the whole fruit of his journey. The aſtronomers choſen by the Academy of Peterſburgh to obſerve the tranſit, had departed a month before; and beſides this, the ſpot aſſigned them, being not ſo far diſtant as Tobolſk, was leſs favourable to aſtronomical obſervations than that city. The Abbe, therefore, ſaw himſelf in a very diſagreeable ſituation, and his whole fear was that, by new delays, he ſhould be prevented from ſeizing the moment proper for obſerving a phenomenon long expected by aſtronomers: but the ſciences luckily found a protector in the Baron de Breteuil, then ambaſſador from the court of France to that of Ruſſia. By the activity of that miniſter, and the aſſiſtance of Mr. de Woronzof, grand chancellor, every difficulty was removed; and the Empreſs Elizabeth gave orders for the Abbe's departure, which was fixed for the 10th of March.

This favour, the object of our academician's wiſhes, ſeemed likely to prove his ruin. It was, indeed, very imprudent, at ſuch an epoch, to run the riſk of croſſing a country eight hundred leagues in extent, which lies between Peterſburgh and Tobolſk; but the Abbe was indebted for his ſafety to the intenſeneſs of the froſt, and the velocity of the ſledges, which was ſo great in rivers, he tells us, that being on that of Docka, one of the poſtilions could not turn aſide the horſes of his ſledge ſpeedily enough to avoid a hole where the water was not froze, and into which the horſe fell; yet the ice in the neighbouring parts was above three feet thick.

It is a very ſingular phenomenon, and demonſtrates, in an evident manner, the efficacy of friction and motion to produce heat, that many holes of the like kind, where the water never freezes, are to be met with on the rivers of Siberia, though, at the ſame time, brandy, and other ſpirits, cannot preſerve their liquidity.

This was not the only danger to which the Abbe was expoſed, in the courſe of his journey. One cannot read, without a certain impreſſion of horror, mixed, however, with ſome pleaſure, the ſtriking and juſt picture which he exhibits of the perils that threatened him every moment, amidſt the ice and the ſnow. If the thermometer, the only thing which announced the approach of a thaw, promiſed him a milder fate, by a decreaſe of the cold, his fears were augmented by a dread of being forced to remain amidſt the foreſts of Siberia. The account which he

has left of that frightful country is melancholy, almoſt beyond deſcription. "No bird," ſays he, "announced the approach of ſpring. The magpies and crows, which are found in great numbers on all the roads throughout Ruſſia, had even abandoned theſe deſarts, and Nature appeared as if in a ſtate of torpor. I could perceive, by the traces of ſledges only, that theſe places were inhabited; a gloomy ſadneſs every where prevailed; and the univerſal ſilence that reigned was never interrupted, but by the cries of ſome one of the company, who had fallen from his ſledge, calling out for aſſiſtance."

After travelling a month in this laborious manner, our intrepid aſtronomer arrived at Tobolſk, where ignorance and ſuperſtition prepared new dangers for him. Rude and barbarous people, ſtruck with the magnificent ſpectacle exhibited by the heavenly bodies, have often taken for the Divinity what is only the effect of his power. In their blindneſs, they almoſt all adore the ſun and the moon, becauſe they are more ſenſible of their immediate influence; and, on this account, they aſcribe ſupernatural power to thoſe who ſeem to have any intercourſe with the heavens. This error, which, even in Europe, gave birth to the follies of aſtrology, had almoſt deprived the Abbe Chappe of his life. The Ruſſians, attentive to all his actions, beheld his preparations with the utmoſt terror: the obſervatory which he cauſed to be erected, and the inſtruments he tranſported thither, encreaſed their alarm, and the overflowing of the river Irtiſh, which inundated part of the city, a natural conſequence of the thaw that took place, ſerved ſtill to confirm them in their ſuſpicions. Mr. Iſmaelof, the governor of Tobolſk, a very enlightened man, to whom we are indebted for a correct chart of the Caſpian Sea, was, therefore, obliged to give the Abbe a guard for his protection; and for the firſt time, perhaps, the ſciences, whoſe empire is founded on peace and happineſs, were under the neceſſity of uſing violence, and of eſtabliſhing themſelves, if we may uſe the expreſſion, by the force of arms.

The moment ſo long wiſhed for, and purchaſed by ſo much labour, being at length arrived, the Abbe, on the 5th of June, made every neceſſary preparation for obſerving the tranſit; but the pleaſure which he anticipated from the ſucceſs of his expedition, was not free from a mixture of pain; for the ſky, during the night, became quite overcaſt. This was a new ſource of uneaſineſs to the Abbe; but luckily for ſcience, a favourable wind, which ſprung up at ſun riſe, revived his hopes, by withdrawing the veil that obſcured the object of his reſearches. The obſervation was made with the neceſſary, preciſion, in preſence

of Mr. Iſmaelof, Count de Pouſkin, and the archbiſhop of Tobolſk; and the academy of ſciences at Paris, as well as that of Peterſburgh, received the particulars of this event ſoon after, by a courier which Mr. Iſmaelof immediately diſpatched.

Aſtronomy was not the only ſtudy which engaged the attention of a genius ſo extenſive as that of the Abbe Chappe: he applied alſo to mineralogy, experimental philoſophy, and natural hiſtory. Aſſiſted by Mr. Deliſle, he rectified the imperfections of the Ruſſian charts; and, at the ſame time, made a ſeries of experiments reſpecting electricity, which he compared with thoſe made at Bitche, in Lorraine, in 1757. His obſervations diſcovered, that in Siberia, where he found electricity much ſtronger than any where elſe, lightning ſometimes aſcended; and he conjectured, that it often riſes from the earth without noiſe, by means of conductors inviſible to us; and that it never produces thunder till it has arrived at a certain height.

The great rains which fell while he was in this country, prevented him from carrying his reſearches farther. He was therefore preparing to return, when his conſtitution, which had hitherto withſtood the influence of a climate for which it was not formed, yielded to the effects of a diſorder, brought on, perhaps, by the fatigue and labour he had undergone. He was attacked by an almoſt continual vomitting of blood, accompanied with ſo great weakneſs that he could ſcarcely walk. Theſe circumſtances made him haſten his departure, and quit, as ſoon as poſſible, a country where the healing art, on a level with other ſciences, that is to ſay, enveloped in the groſſeſt clouds of ignorance, was acquainted with no other remedy than the uſe of ſtoves.

Being an accurate obſerver, the Abbe Chappe ſuffered no remarkable object in the country which he traverſed to eſcape his notice. It is true, that in theſe deſarts, they were more uncommon than he could have wiſhed; but he found in the mines of Katerinburg, the only ones almoſt which the Ruſſians poſſeſs, enough to gratify his curioſity. He deſcended into them; examined them with the utmoſt care; and made excellent remarks on the nature of the ſurrounding ſoil, the quality of the metals they produce, and the manner in which they are worked.

From Katerinburgh he proceeded to Caſan, the capital of the kingdom of the ſame name. The ſight of this city, ſituated in a temperate climate, afforded him the more pleaſure, as it reminded him in ſome meaſure of his own country. Trees load-

ed with fruit, which the cold had reſpected; gardens laid out with taſte, and a certain air of grandeur, and opulence, all concurred to preſerve the agreeable illuſion. The governor, a Tartar prince, ſhewed him every mark of kindneſs; and he was well received alſo by the archbiſhop, whoſe mind, cultivated by the ſtudy of literature, and the ſciences, had preſerved itſelf from the contagion of fanaticiſm and ſuperſtition. "This" ſays, the Abbe, in the account of his journey, "was the only prieſt I ſaw, in theſe vaſt territories, who did not appear aſtoniſhed, that one ſhould come from Paris to Tobolſk to obſerve Venus."

The glory of this obſervation had preceded the Abbe, and prepared new honors for him at Peterſburgh. The Empreſs, with a view of inducing him to ſettle there, made him an offer, by means of Baron de Breteuil, of the diſtinguiſhed place which had been occupied by Mr. Deliſle. The advantages, however, attending this ſituation, though very conſiderable, were no balance in the Abbe's heart, to the love of his country, and the ſentiments of gratitude which he entertained for the kindneſs of his ſovereign. The Abbe therefore rejected the offers made him; but he ſpent the winter at Peterſburgh, and did not return to Paris, till the month of Auguſt, 1762, after being abſent from it two years. Immediately after his arrival, he began to prepare an account of his journey, which was publiſhed, in 1768, in three volumes quarto, elegantly printed, and adorned with engravings; but it is much to be regretted that the ſtyle is not always ſuited to the magnificence of the work. It was, however, much eſteemed; and would, perhaps be more ſo, were it better known, as the author gives a moſt minute and inſtructive account of every thing reſpecting his journey, which was undertaken principally with a view of obſerving the tranſit of Venus at Tobolſk. The philoſopher will find in it the hiſtory of mankind and of nature; and the ſtateſman the political ſyſtem and intereſt of nations.

The Abbe has omitted nothing that could add to the knowledge which we have of an ignorant and brutal people, who, when they came from the hands of the Czar Peter, if we may uſe the expreſſion, at the beginning of this century, had no connection with the civilized part of Europe, and who, in our days, have ſo much influence over the affairs of the North. The Abbe Chappe ſeems too deſirous of combating the opinion formed of Ruſſia, and which the ſucceſs of its arms perhaps juſtifies. "My friend," ſays he, "wrote to me from the capital of France

to examine thoroughly that country, from which ſwarms of people, at a moment's warning, might iſſue like the Huns, and ſwallow up all the reſt of Europe: Inſtead of theſe people, I found nothing but deſarts and marſhes."

The great labour required to prepare this work for publication, did not interrupt the Abbe's aſtronomical purſuits. He enriched the memoirs of the academy with ſeveral inſtructive pieces, and that which he preſented in 1767, is the more valuable, and it confirms the experiments made upon electricity at Tobolſk, and demonſtrates the identity of the electric fluid with lightning.

Another tranſit of Venus, which, according to aſtronomical calculations, was to take place on the 3d of June, 1769, afforded the Abbe Chappe a new opportunity of manifeſting his zeal for the advancement of aſtronomy. California was pointed out as the propereſt place in that quarter for obſerving this phenomenon; and the Abbe, who had triumphed over the ſeverity of the North, thought he could brave alſo the ardors of the torrid zone. He departed therefore, from Paris in 1768, in company with Mr. Pauly, an engineer, and Mr. Noel, a draftſman, whoſe talents gave reaſon to hope, that he might contribute to render the expedition intereſting, in more reſpects than one. He carried with him a watchmaker alſo, to take care of his inſtruments, and to keep them in proper repair.

On his arrival at Cadiz, the veſſel belonging to the Spaniſh flota, in which he was to embark for Veracruz, not being ready in time, he obtained an order for equipping a brigantine, which carried twelve men. The fragility of this veſſel, which would have alarmed any other perſon, appeared to the Abbe as adding to the merit of the enterprize. Judging of its velocity by its lightneſs, he conſidered it as better calculated to gratify his impatience; and in this he was not deceived: for he arrived ſafe at the capital of New Spain, where he met with no delay. The Marquis de Croix, governor of Mexico, ſeconded his activity ſo well, that he reached St. Joſeph nineteen days before that marked out for the obſervation.

The village of St. Joſeph, where the Abbe landed, was deſolated by an infectious diſorder, which had prevailed for ſome time, and deſtroyed a great many of the inhabitants. In vain did his friends, from a tender ſolicitude for his preſervation, urge him to remove from the infection—in vain did they adviſe him not to expoſe himſelf imprudently, and to take his ſtation at ſome diſtance towards Cape San-Lucar. His ardent and lively zeal for the progreſs of ſcience, ſhut his ears againſt all the remonſtrances of his friends, or rather of reaſon; and the only

danger he foreſaw was, that of loſing an opportunity of accompliſhing the object of his wiſhes. He had the good fortune, however, to make his obſervations, in the completeſt manner, on the 3d of June; but becoming a victim to his reſolution, he was three days after attacked by the diſtemper, which ſeemed hitherto to have reſpected him. Surrounded by his acquaintances, either ſick, or dying, and deſtitute of that aſſiſtance which he had given them as long as health remained, the Abbe was ſtruggling between life and death, when by his own imprudence he deſtroyed every ray of hope, and haſtened that fatal period which deprived the world of this valuable member of ſociety. The very day he had taken phyſic, he inſiſted upon obſerving an eclipſe of the moon; but ſcarcely had he finiſhed his obſervation, when his diſorder grew conſiderably worſe, and the remedies adminiſtered not being able to check its progreſs, he died on the 1ſt of Auguſt, 1769, in the forty ſecond year of his age.

Had it not been for the care of a very reſpectable French academician, the fruits of this obſervation would have been entirely loſt to the learned. The Abbe Chappe having at his death committed his papers to the care of Mr. Pauly, they were afterwards arranged and publiſhed by Mr. Caſſini, the ſon, who at an age when others only afford hopes of their future celebrity, had acquired the higheſt reputation. It was reſerved for this gentleman to preſerve, if we may ſay ſo, the exiſtence of a philoſopher whom his grandfather had formed; and if any thing could conſole the public for the loſs occaſioned by the Abbe being prevented from putting the laſt hand to his work, it certainly was the ſeeing it appear under the auſpices of ſo able an editor.

The Abbe Chappe always beheld death with a firmneſs, and reſolution, which can be inſpired only by the teſtimony of a pure conſcience. The evening before his departure from Paris, being at ſupper with Count de Mercy, the Imperial Ambaſſador, ſeveral of his friends repreſented to him, that he ought not to undertake ſuch a voyage, and offered to lay a conſiderable wager that he would never return. "Were I certain," replied the Abbe "that I ſhould die the next morning after I had made my obſervation, I would not heſitate a moment, nor be in the leaſt deterred from embarking." Four days indeed, before his death, he ſaid to thoſe who were around him. "I muſt go.—I am ſenſible that I have only a few days to live—I have, however, accompliſhed my object, and I die contented." An heroic ſentiment, which paints, in a few words, the character of this learned man, whoſe death was much lamented; and fully proves that the love of the ſciences, as well as the love of one's country may produce a Decius.

LIFE OF JOHN FOTHERGILL, M. D. F. R. S.

(Concluded from page 352.)

AT his meals he was remarkably temperate; in the opinion of ſome rather too abſtemious, eating ſparingly, but with a good reliſh, and rarely exceeding two glaſſes of wine at dinner or ſupper; yet, by this uniform aud ſteady temperance, he preſerved his mind vigorous and active, and his conſtitution equal to all his engagements.

Perſons, whoſe ſtated employments preclude the enjoyment of leiſure, naturally acquire a habit of brevity in the diſpatch of their concerns. In converſation, they apply immediately to the ſubject of diſcuſſion; and, in writing, they compreſs much in a ſmall ſpace. In addition to this forceed diſpatch, acquired by the urgency of important tranſactions. Dr. Fothergill poſſeſſed a remarkable quickneſs of perception, and, what is rather unuſual, to vivacity of mind united ſolidity of judgment. Thoſe who did not perſonally know him muſt have formed the ſame opinion of him, from the genius and ſagacity which are diſplayed in his early publications. Some of theſe have been already mentioned, and we may add to them his Eſſays in the *Gentleman's Magazine* for 1751, and the three following year.

His pieces in the *Medical Inquiries*, a publication begun in June, 1757, and afterwards continued, have been read by the Faculty, and always with approbation, as they contain facts that cannot be too generally known. If his language was not always correct, it was eaſy and fluent, and what in ſuch compoſitions is more valuable, it was accurately deſcriptive.

His epiſtolary correſpondence was inſtructive and lively. As he was not confined there to the didactic ſolemnity of medical diſquiſitions, his language was more brilliant, but leſs correct; and, as in converſation, the ſame ſentiments were conveyed in a livelineſs of coloring, and frankneſs of expreſſion, that, in any

other point of view, might have afforded no emotion of pleaſure, or proof of ſuperior endowments. There was, indeed, a charm in his diſcourſe and addreſs, that affected ſome with a tranſport of admiration, and commanded the higheſt regard and opinion of thoſe who employed him, whilſt, by a diſcreet uniformity of conduct, he ſo fixed the capriciouſneſs of mankind, that he was not apt to forfeit the eſteem he had once acquired. His mind was of that happy verſatility, that he could eaſily break off from more important concerns, and enter into familiar and pleaſant converſation, with all the indifference of a man of leiſure, and eaſily reſume the variety of his ſerious engagements, as if they had never been interrupted.

There is no character, however exalted, and no man, however virtuous, but has ſome enemies; and the world in general are too ready to liſten to the voice of ſcandal and defamation. "A life, thus ſpent in the conſcientious diſcharge of every duty," ſays Dr. Fothergill's biographer, "and the uniform practice of every virtue, could not ſhield him from the miſrepreſentations of envy, malevolence, and avarice, as the accuſations of two perſons, at different periods of time, amply proved. Thoſe who have been acquainted with Dr. Fothergill, during the laſt ten or twelve years of his life, muſt know that I allude to the proſecution commenced againſt him by one, for a ſuppoſed injury; and to the partiality of which he was accuſed by the other, in adjuſting a difference between him and a reſpectable baronet. Of theſe tranſactions it is unneceſſary here to enter into a minute detail. The decree pronounced on the former caſe, by that learned and ſagacious judge, the Lord Chief Juſtice of England, moſt honorably juſtified his character from every imputation of wrong, and his own pen* not only entirely vindicated him from every aſperſion of partiality and injuſtice, thrown upon him by his accuſer, but alſo exhibited moſt exemplary inſtances of candor, liberality of ſentiment, and generoſity."

To thoſe examples already given of Dr. Fothergill's benevolent liberality we muſt add the following, eſpecially as ſuch inſtances, however applauded, are very uncommon in the preſent day. The late Dr. Knight, librarian of the *Britiſh* Muſeum, whoſe character was deſervedly eſteemed, by ſome ſpeculations in mining, rather plauſible than productive, became ſo involved in his circumſtances, as to be obliged to apply to thoſe whom he

* Introductory Remarks on the Preface of Parkinſon's Journal of a Voyage.

deemed his friends for pecuniary ſupport; but his applications were received with coolneſs. In this dilemma, the ingenious *Knight*, with great diffidence, made his caſe known to the Doctor, and told him what would once more render him a happy man. The anſwer given by the phyſician of philanthropy, whoſe heart never felt the diſtreſs of another, without wiſhing to relieve it, was ſhort but expreſſive—"*I will then make thee happy*." We are aſſured, that the aſſiſtance given, upon this occaſion, amounted to a *thouſand guineas*.

ACCOUNT OF DIOGENES.

FROM ANARCHARSIS' TRAVELS.

I SAW a man arrive there, about five and forty, without ſhoes or tunic, with a long beard, a ſtaff in his hand, a wallet over his ſhoulders, and a cloak, under which he held a live cock ſtripped of its feathers. This he threw into the middle of the aſſembly, ſaying, "Behold the man of Plato," and inſtantly diſappeared. Plato ſmiled. His diſciples murmured. Apollodorus ſaid to me: Plato had defined man to be a two-footed animal without feathers, and Diogenes has taken this method to ridicule the definition as inaccurate. I took this ſtranger, ſaid I, for one of thoſe importunate beggars to be met with in every opulent and poliſhed nation. He does indeed beg ſometimes, anſwered my companion, but not always from want. Obſerving my ſurpriſe increaſe, Let us ſit down ſaid he, under this plane tree; I will give you his hiſtory in a few words, and make you acquainted with ſome celebrated Athenians whom I ſee in the adjoining walks. We ſat down facing a tower, named after Timon the miſanthro-

* The immenſe artificial loadſtone, deſcribed in Dr. Fothergill's works, was the invention of Dr. Knight, and preſented by the former to the Royal Society.

piſt, and a riſing ground, covered with verdure and houſes, called Colonos.

About the time that Plato opened his ſchool at the academy, reſumed Apollodorus, Antiſthenes, another diſciple of Socrates eſtabliſhed one likewiſe, on an eminence ſituated on the oppoſite ſide of the city. This philoſopher laboured, during his youth, to make an external diſplay of the moſt rigid virtue; and Socrates, penetrating his intentions, one day ſaid to him, Antiſthenes, I ſee your vanity through the rents in your garment. His maſter had taught him that happineſs conſiſts in virtue; and he made virtue conſiſt in a contempt of riches and enjoyments; and, to enforce his maxims, appeared in public, with a ſtaff, and wallet over his ſhoulders, like one of thoſe unhappy mendicants who expoſe their wretchedneſs to paſſengers. The ſingularity of this ſight procured him diſciples, who remained attached to him for ſome time by his eloquence. But the auſterities he preſcribed made them gradually diſappear, and, diſguſted at this deſertion, he ſhut up his ſchool.

Diogenes now made his appearance in this city. He had been baniſhed from Sinope, his native country, with his father, accuſed of diminiſhing the coin. After a long reſiſtance, Antiſthenes imparted to him his principles, and Diogenes preſently gave them a greater extent. Antiſthenes ſought to correct the paſſions, Diogenes to deſtroy them. The wiſe man, to become happy, ſhould, according to him, render himſelf independent of fortune, of mankind, and of himſelf; of fortune, by braving alike her favours and caprices; of men, by diveſting himſelf of prejudices, and deſpiſing cuſtoms, and even laws, when not conformable to his underſtanding; of himſelf, by labouring to fortify his body againſt the rigour of the ſeaſons, and his mind againſt the allurements of pleaſure. He ſometimes ſays, "I am poor, a vagabond, without country, without aſylum, and compelled to live as I can from one day to another: but I oppoſe courage to fortune, nature to the laws, and reaſon to the paſſions." From theſe principles, which, in their reſpective conſequences, may lead men to the ſummit of perfection, or plunge them into every ſpecies of diſorder, reſults a contempt for riches, honours, glory, the diſtinction of ranks, the decorum of ſociety, the arts and ſciences, and all the comforts and embelliſhments of life. The man, created in the imagination of Diogenes, and whom he ſometimes goes in ſearch of with a lantern; that being, foreign to every ſurrounding object, and inacceſſible to every thing that gratifies the ſenſes, who ſtyles himſelf a citizen of the world,

though he claims not that relation to his native land; that man would be as wretched as unprofitable in poliſhed ſocieties, and never did exiſt even prior to their origin. Diogenes imagines he can diſcover ſome faint reſemblance of him among the Spartans: "I have found men no where," ſaid he, "but I have ſeen children at Lacedaemon.

To repreſent in his own perſon the man of his idea, he has undergone the rudeſt trials, and emancipated himſelf from every ſpecies of conſtraint. You will ſee him ſtruggling againſt hunger, appeaſing it with the groſſeſt aliments, refuſing to gratify it at entertainments, where the table is covered with abundance; ſtretching out his hand for alms to paſſengers; at night, ſhutting himſelf up in a tub; expoſing his body to the injuries of the weather, under the portico of a temple; rolling himſelf in ſummer on the burning ſand, and in winter walking, with naked feet, amid the ſnow; ſatisfying all the wants of nature in public, and in places frequented by the dregs of the people; courageouſly braving and ſupporting ridicule, inſults and injuſtice; acting in oppoſition to eſtabliſhed cuſtoms, even in things the moſt indifferent; and daily exhibiting ſcenes which, whilſt they excite the contempt of ſenſible men, reveal but too plainly to their eyes the ſecret motives that influence his conduct. I one day ſaw him, during a ſevere froſt, embracing, half naked, a brazen ſtatue. A Lacedaemonian aſked him if he ſuffered pain. No, ſaid the philoſopher. What merit is there then in what you do? replied the Lacedaemonian.

Diogenes poſſeſſes depth of underſtanding, firmneſs of mind, and livelineſs of character. He delivers his doctrines with ſuch perſpicuity, and explains them with ſo much energy, that ſtrangers have been ſeen to liſten to him, and inſtantly abandon all to follow him. Believing himſelf deſtined to reform mankind, he treats them without the ſmalleſt deference. His ſyſtem leads him to inveigh againſt vices and abuſes, and his character unrelentingly to purſue thoſe who are guilty of them. He never ceaſes to attack them with the weapons of ſatire, and an irony a thouſand times more formidable. The freedom that reigns in his diſcourſes renders him agreeable to the people. He is admitted into good company, which he ſerves to enliven by ready repartees, ſometimes happily hit off, and at all times frequent; for he heſitates at nothing. Young people court his company, to make trials of pleaſanty, and avenge themſelves of his ſuperiority by inſults, which he ſupports with the moſt mortifying;

tranquility. I have often ſeen him reproach them with expreſſions and actions that put modeſty to the bluſh, which inclines me to believe that he has never himſelf been guilty of thoſe exceſſes his enemies impute to him. His indecency lies rather in the manner than in the thing being really offenſive to good morals. Eminent talents, great virtues, and prodigious efforts, will never make more of him than a ſingular man; and I ſhall always ſubſcribe to the judgment of Plato, who ſaid of him, "He is Socrates in a phrenzy."

An account of the Indians of Porto de la Trinidad, in 41 N. Lat. on the N. W. Coaſt of America, from the Spaniſh Journal by Don Franciſco Maurelle, of a Voyage in 1775, to explore the Coaſt of America, Northward of California, tranſlated by the Hon. Daines Barrington.

FROM BARRINGTONS' MISCELLANIES.

ON the 11th of June 1775, we had fixed every thing with regard to our anchorage, and we determined to take poſſeſſion of the country, upon the top of a high mountain, which lyes at the entrance of the port. For this purpoſe our crews divided into different parties, which were properly poſted, ſo that the reſt might proceed without any danger of an attack. We moreover placed centinels at a conſiderable diſtance to reconnoitre the paths uſed by the Indians, who poſſeſſed themſelves of thoſe parts from which we had moſt to fear. With theſe precautions the crews marched in two bodies, who adored the holy croſs upon diſembarking, and when at the top of the mountain formed a ſquare, the centre of which became a chapel. Here the holy croſs was again raiſed, maſs celebrated, with a ſermon, and poſſeſſion taken, with all the requiſites enjoined by our inſtructions.

We alſo fired both our muſquetry and cannon, which naturally made the Indians ſuppoſe we were irreſiſtible. After they had recovered their fright however, and found that we had done them no harm, they viſited us again, and probably to examine more nearly what had occaſioned the tremendous noiſe which they had never heard before. As we thus took poſſeſſion on the day when holy mother church celebrates the feſtival of the moſt holy Trinity, we named the port accordingly.

The following days were taken up in procuring wood and water, whilſt the ſchooner was careened. We likewiſe cut ſome maſts for her.

We could not but particularly attend to all the actions of the Indians, their manner of living, habitations, garments, food, government, laws, language, and arms, as alſo their hunting and fiſheries. The diſtruſt indeed which we naturally entertained of theſe barbarians, made us endeavour to get as great an inſight into all theſe as poſſible, yet we never obſerved any thing contrary to the moſt perfect friendſhip and confidence which they ſeemed to repoſe in us. I may add, that their intercourſe with us was not only kind, but affectionate.

Their houſes were ſquare, and built with large beams, the roofs being no higher than the ſurface of the ground, for the doors to which they make uſe of a circular hole, juſt large enough for their bodies to paſs through. The floor of theſe huts are perfectly ſmooth and clean, with a ſquare hole two feet deep in the centre, in which they make their fire, and round which they are continually warming themſelves, on account of the great cold. Such habitations alſo ſecure them, when not employed out of doors, from the wind and noxious animals.

The men however do not wear any covering, except the cold is intenſe, when indeed they put on their ſhoulders the ſkins of ſea wolves, otters, deer, or other animals; many of them alſo have round their heads ſweet ſmelling herbs. They likewiſe wear their hair either diſhevelled over their ſhoulders, or otherwiſe *en caſtanna*.

In the flaps of their ears they have rings like thoſe at the end of a muſquet.

They bind their loins and legs quite down to the ancles, very cloſely, with ſtrips of hide or thread.

They paint their face, and greater part of their body, regularly either with a black or blue colour.

Their arms are covered with circles of ſmall points in the

ſame manner that common people in Spain often paint ſhips and anchors.

The women cover the tops of their heads with an ornament like the creſt of a helmet, and wear their hair in two treſſes, in which they ſtick many ſweet ſmelling herbs. They alſo uſe the ſame rings in their caps (which are of bone) as the men are before deſcribed to do, and cover their bodies with the ſame ſkins, beſides which they more decently wear an apron of the ſame kind, about a foot wide, with ſome threads formed into a fringe. They likewiſe bind their legs in the ſame manner with the men.

The underlip of theſe women is ſwelled out into three *faſcias*, or riſings, two of which iſſue from the corners of the mouth to the loweſt part of the beard, and the third from the higheſt point, and middle of that point to the lower, like the others, leaving between each a ſpace of clear fleſh, which is much larger in the young than in the older women, whoſe faces are generally covered with punctures, ſo as to be totally diſfigured.

On their necks they wear various fruits, inſtead of beads; ſome of theſe ornaments alſo conſiſt of the bones of animals, or ſhells from the ſea coaſt.

This tribe of Indians is governed by a ruler, who directs where they ſhall go both to hunt and fiſh for what the community ſtands in need of. We alſo obſerved that one of theſe Indians always examined carefully the ſea ſhore, when we went to our ſhips on the cloſe of twilight, the occaſion of which probably was to take care that all their people ſhould return ſafe to their habitations about that time.

It ſhould ſeem that the authority of this ruler is confined to a particular village of theſe habitations, together with ſuch a diſtrict of country as may be ſuppoſed to belong to the inhabitants of ſuch a community, who ſometimes are at war with other villages, againſt whom they appeared to aſk our aſſiſtance, making us ſigns for that purpoſe. There are however many other villages which are friendly to each other, if not to theſe Indians; for on our firſt arrival more than 300 came down in different parties, with their women and children, who were not indeed permitted to enter the village of our Indians.

Whilſt this ſort of intercourſe continued between us, we obſerved an infant who could ſcarcely be a year old, ſhooting arrows from a bow proportioned to his ſize and ſtrength, and who

hit one's hand at two or three yards diſtance, if it was held up for a mark.

We never obſerved that theſe Indians had any idols, or made ſacrifices: but as we found out that they had a plurality of wives, or women, at leaſt, we inferred, with good reaſon, that they were perfect atheiſts.

Upon the death of one of theſe Indians, they raiſed a ſort of funeral cry, and afterwards burned the body within the houſe of their ruler: but from this we could not pronounce they were idolators, becauſe the cry of lamentation might proceed from affliction, and the body might have been burnt, that the corpſe ſhould not be expoſed to wild beaſts; or perhaps this might have been done to avoid the ſtench of the deceaſed, when putrefaction might commence.

We are not able to underſtand one of their regulations, as they permitted our people to enter all their houſes, except that of their ruler; and yet when we had broken through this etiquette, we could not obſerve any thing different between the *palace*, and the other huts.

It was impoſſible for us to underſtand their language, for which reaſon we had no intercourſe but by ſigns, and therefore both parties often continued in a total ignorance of each other's meaning: we obſerved however that they pronounced our words with great eaſe.

Their arms are chiefly arrows pointed with flint, and ſome of them with copper or iron, which we underſtood were procured from the N. and one of theſe was thus marked C. Theſe arrows are carried in quivers of wood or bone, and hang from their wriſt or neck.

But what they chiefly value is iron, and particularly knives or hoops of old barrels; they alſo readily barter for bugles, whilſt they rejected both proviſions or any article of dreſs. They pretended however that they ſometimes approved the former, in order to procure our eſteem; but ſoon after they had accepted any ſort of meat, we obſerved that they ſet it aſide, as of no value. At laſt indeed they took kindly to our biſcuits, and really eat them.

Amongſt theſe Indians there was one who had more familiar intercourſe with us than all the reſt, ſitting down with us in ſight of his countrymen.

They uſed tobacco, which they ſmoaked in ſmall wooden pipes, in form of a trumpet, and procured from little gardens where they had planted it.

They chiefly hunt deer, cibulos, ſea wolves, and otters, nor did we obſerve that they purſued any others. The only birds we met with on this part of the coaſt were daws, hawks, very ſmall paroquets, ducks, and gulls; there were alſo ſome parrots with red feet, bills, and breaſts, like lories both in their heads and flight.

The fiſh on that coaſt are chiefly ſardines, perjercy, and cod; of which they only bring home as much as will ſatisfy the wants of the day.

We tried to find if they had ever ſeen other ſtrangers, or ſhips, than our own, but though we took great pains to inform ourſelves on this head, we never could perfectly comprehend what they ſaid; upon the whole we conceived that we were the only foreigners who had ever viſited that part of the coaſt.

We likewiſe endeavoured to know from them whether they had any mines or precious ſtones, but in this we were likewiſe diſappointed.

What we ſaw of the country leaves us no doubt of its fertility, and that it is capable of producing all the plants of Europe. In moſt of the gullies of the hills there are rills of clear and cool water, the ſides of which are covered with herbs (as in the meadows of Europe) of both agreeable verdure and ſmell. Amongſt theſe were Caſtilian roſes, ſmallage, lilies, plantain, thiſtles, camomile, and many others. We likewiſe found ſtrawberries, raſberries, blackberries, ſweet onions, and potatoes, all which grew in conſiderable abundance, and particularly near the rills. Amongſt other plants we obſerved one which much reſembled percely (though not in its ſmell), which the Indians bruiſed and eat, after mixing it with onions.

The hills were covered with very large, high, and ſtrait pines, amongſt which I obſerved ſome of 120 feet high, and 4 in diameter towards the bottom.

All theſe pines are proper for maſts and ſhip building.

The outline of the port is repreſented in Chart the 6th, which was drawn by D. Bruno Heceta, D. Juan Fr. de la Bodega, and myſelf. Though the port is there repreſented as open, yet it is to be underſtood that the harbour is well ſheltered from the S. W. W. & N. W. as alſo from the N. N. E. and E.

[This diſcovery was made by the ſchooner on the 19th of June.]

In the W. part there is a hill 50 fathoms high, joining to the continent on the N. ſide, where there is another riſing of 20,

both of which afford protection not only from the winds, but the attack of an enemy.

At the entrance of the port is a ſmall iſland of conſiderable height, without a ſingle plant upon it; and on the ſides of the coaſt are high rocks, which are very convenient for diſembarking; goods alſo may be ſhipped ſo near the hill, that a ladder may be uſed from the land to the veſſel; and near the land are many ſmall rocks, which ſecure the ſhip at anchor from the S. E. and S. W.

We compleated our watering very early from the number of rills which emptied themſelves into the harbour; we were likewiſe as ſoon ſupplied with wood.

We paid great attention to the tides, and found them to be as regular as in Europe.

We made repeated obſervations with regard to the latitude of this harbour, and found it was exactly 41 degrees and 7 minutes N. whilſt we ſuppoſed the Longitude to be 19 degrees and 4 minutes W. of S. Blas.

We had thus thoroughly inveſtigated every thing which relates to this harbour, except the courſe of a river which came from the S. W. and which appeared whilſt we were at the top of the hill. We took therefore the boat on the 18th, and found that the mouth was wider than is neceſſary for the diſcharge of the water, which is loſt in the ſands on each ſide, ſo that we could not even enter it except at full tide. However we left our boat, and proceeded a league into the country, whilſt the river continued of the ſame width; viz. 20 feet, and about five deep.

On the banks of this river were larger timber trees than we had before ſeen, and we conceived that in land floods the whole plain (which was more than a quarter of a league broad) muſt be frequently covered with water, as there were many places where it continued to ſtagnate.

We gave this river the name of *Pigeons*, becauſe at our firſt landing we ſaw large flocks of theſe, and other birds, ſome of which had pleaſing notes.

On the ſides of the mountains we found the ſame plants and fruits, as in the more immediate neighbourhood of Trinity harbour.

MEMOIRS ON SOME NEW FLEXIBLE AND ELASTIC STONES.

BY M. FLEURIAU DE BELLEVUE, OF THE ROYAL ACADEMIES OF GENEVA AND ROCHELLE.

Read at the Society of Natural History at Geneva.

I HAVE the honor to present to the society a flexible and elastic marble, which I found on Mount St. Gothard, in the month of July lasts and which appears to me to merit some attention, both on account of its singular property, and of the geological circumstances which accompany it.

Hitherto we have heard only of two sorts of stones which have been peculiarly denominate elastic, one calcareous, and the other quartzous; the first is a marble at the Borgheſe palace in Rome, which belonged to an old building, and the origin of which is absolutely uncertain; the other a quartz, preserved in some cabinet, and which is said to have come from Brasil, but the origin of which is very uncertain. These stones, which have both been esteemed very remarkable, have been sold at a very high price. Their texture, which is coarser than most other flexible minerals, may by that alone furnish us with some ideas respecting the cause of that singular property in them.

The first species ceases now to be unique, since a pretty considerable quantity has been found in a part of Switzerland. This marble is described—In colour white, with a little yellow. In masses irregular. Its surface is grained. It is shining both within and without; when broken, it is more compact than most marbles; it is softer than ordinary marble, and is partly elastic: this flexibility is very sensible, when the length is ten or twelve times more than its thickness; when one of its extremities is fixed, the other may be bent to form an arc of about three degrees from its ordinary direction; but this varies in different parts of the stone, it being greatest in the center layers, and may be augmented by shaking the stone repeatedly. The elasticity of this stone

is very remarkable. Its ſpecific gravity is greater than that of moſt marbles; when ſtruck in the dark, it yields a phoſphoric red light. It reſiſts the fire more than pure lime ſtone; when put on a hot iron, it produces a phoſphoric light of a reddiſh white, lively, and which remains ſome time. Water penetrates into it with great facility: in a few ſeconds it will be moiſtened for ſome lines; it then becomes more brittle and friable, but without augmenting its flexibility: but put in water heated to 70 degrees, for three quarters of an hour, it abſorbs two hundredth parts of its weight. This ſtone much reſembles the marble of Tirol, found by the younger M. de Sauſſure, and called by him *dolomies*.

In acids it cauſes but little efferveſcence, and diſſolves but ſlowly, for which it requires ſeven hours in nitrous acid: it will not entirely diſſolve, but leaves ſome remains.

I have not analyſed this marble, but the preſence of mica, of ſteatites, and other circumſtances, induce me to believe that argile and magneſia enter into its compoſition.

It appears to me, that this marble muſt neceſſarily be of the ſame ſpecies with that in the palace Borgheſe: this latter reſembles the marble of Tarara; it is very brittle, eaſily reduced to powder, and ſeems to have a grain ſomewhat round, and laſtly, it contains a mica; all which characters are found in the former. It reſembles alſo a marble called *retulio*, which M. Dolomieu mentions in the *Journal de Phiſique* for November 1791, of which he ſays, it was of ſo dry a nature, that ſtatues made of it broke of themſelves in a few years, in thoſe parts which had no ſupport; thus it is with our marble, in thoſe ſtrata which are expoſed to the air.

I agree with M. Dolomieu in his opinion reſpecting the marble in the palace Borgheſe, who ſays, that it owes its faculty of bending to that ſtate of dryneſs, which has weakened the adherence of its particles; and I think that the form of the particles contributes partly to this effect.

I found this marble in the *Val Levantine*, ſeven hours-journey from the hoſpital of St. Gothard, in the country of Campo Longo, on the confines of the *Val Maggio*. It does not begin to appear until we are about the height of one thouſand toiſes: there it forms a part of an immenſe bed of *trimoleth*, which is irregular. Theſe two rocks are ſo intermixed in this bank, that at firſt view we ſee no difference, but that one is mixed with criſtals, and the other is not.

LETTER

From Mr. de LUC, on GRAVITY.

Mr. de LUC, begins with obſerving, that, although terreſtrial may be diſtinguiſhed from general phyſics to a certain point, conſidering the latter as furniſhing the former with a ſmall number of laws, atteſted by conſtant experience, and admitted by all philoſophers, ſuch is the concatenation of cauſes in nature, that they cannot be diſtinguiſhed with marked preciſion, and we know not where to place the boundary to prevent phyſical theories from loſing more or leſs of their certainty, copiouſneſs, nay and of their evidence, though at bottom they are true. The laws of gravity and coheſion are ſufficiently eſtabliſhed to be admitted in terreſtrial phyſics in their common ſignification, without occaſioning doubts, and even without riſk of error, if ſtrictly obſerved. Chemical affinities, conſidered as general phenomena, alſo appear to require only a particular determination of their laws in detail, as ſucceſſively furniſhed by experience; though theſe laws are already ſo complex, that it would be uſeful for us to be enlightened by their cauſes, to prevent our falling into miſtake. When, however, we come to expanſible fluids, their modifications, and the different actions they exert, phenomena which muſt be intimately connected with general cauſes in nature, we are aſtoniſhed not yet to find a preciſe definition of theſe fluids, or determination of their general laws, eſtabliſhed as a common code amongſt philoſophers. This, affecting preciſely that claſs of ſubſtances about which philoſophers are at preſent chiefly engaged, is one principal cauſe of their diſagreement, and a grand obſtacle to the progreſs of true knowledge. At the time when air and fire were conſidered as elements, and elaſticity like that of a ſpring was attributed to them, the ſcience of terreſtrial phyſics was ſo vague and confined, that this idea of elaſticity was on a par with moſt other common opinions concerning nature: and philoſophers employed the expreſſion, till a more intimate acquaintance with facts ſhould give them ideas more

clear. Experience and obſervation have ſince that period made as much progreſs as might have been expected; but natural philoſophy, that ſcience of which it is the province to account for the phenomena of nature, has not advanced with equal ſtep. At preſent expanſible fluids occupy the attention of all, yet the vague idea of elaſticity is retained as a character of their claſs, whence many phenomena that proceed immediately from the nature of theſe fluids are aſſigned to other cauſes, which throws in the way of our reſearches much obſcurity. A preciſe definition of the nature of expanſible fluids is one of the objects which ought at preſent moſt ſtrongly to engage the attention of philoſophers, as a mean of preſerving them from miſtake concerning cauſes whilſt they advance in this diſcovery of facts.

From this, after calling to the remembrance of the reader his Reſearches concerning the Modifications of the Atmoſphere, introductory to his mentioning Mr. le Sage, as a philoſopher to whom he was indebted for his ideas concerning the cauſe of gravity, Mr. de Luc proceeds to devolve the ſyſtem of that gentleman: a ſyſtem on which Mr. le Sage has employed his attention near fifty years, but which, embracing a vaſt field of experiment and calculation, his health has not yet permitted him to lay before the public, deſirous as he was, that it ſhould not appear till he could eſtabliſh it on immoveable foundations. At an early age, Mr. le Sage was ſtruck with the conſideration, that, wherever the cauſes of motion or of tendency to motion are immediately known to us, we perceive actual impulſe. From this foundation he has conſtructed his theory. His fundamental hypotheſis is—"Corpuſcles exceſſively ſmall move in a right line, in every direction, with extreme rapidity." The reſt of his ſyſtem conſiſts only in geometrical determinations. He determines, for inſtance, the magnitude of theſe corpuſcles, comparatively with the ſmalleſt pores of bodies; their velocity, compared with that of light for example; the diſtance of thoſe which ſucceed in the ſame lines, compared with the diameter of the earth; the diſtance of their parallel files, compared with the magnitude of the atoms that compoſe ſenſible ſubſtances: and all theſe determinations are deduced from phenomena. Proceeding, by analyſis and analogy, from phenomena in which the agents are beſt known to phenomena of the ſame kind the agents in which recede farther and farther from our obſervation, Mr. le Sage has extended the idea of mechanical cauſes to the moſt general phenomena: and thus he has reduced all the ſcience of natural philoſophy to that ſole truly ſimple and intelligible

principle of mechanics, the inertia of impenetrable extenſion (*etenduc.*)

I come now, ſays Mr. de Luc, to ſuch part of this ſyſtem as I can exhibit with the leaſt difficulty, in order to bring it to that point where it connects with my own reſearches in experimental philoſophy.

The corpuſcles above mentioned moving all ways, it is evident, that every ſenſible point of that portion of ſpace which we call the univerſe is traverſed in every direction, at every ſenſible inſtant of time: ſo that theſe points may be conſidered as centers, at which corpuſcles arrive from all ſides, as particles of light arrive at them from all the ſtars. Now in the ſyſtem of Mr. le Sage, theſe corpuſcles in motion produce, mediately or immediately, all the phyſical phenomena of the univerſe. To begin with the greateſt immediate effect of this mechanical cauſe, gravity, let us ſuppoſe, that, beſide theſe corpuſcles, there exiſts in all ſpace but one ſole atom belonging to ſenſible ſubſtances. This atom, occupying one of thoſe ſenſible points, at which corpuſcles arrive from every ſide, will be ſtruck by them on every part, and of courſe will remain ſenſibly immoveable. Now if a ſecond atom ſhould come afterwards to exiſt at a ſenſible proximity to the other, it is evident, that each of theſe will protect the other from the ſhocks of thoſe corpuſcles which ſtrike it on the outer ſurface. The atoms, therefore, will receive fewer ſhocks on the ſurfaces they preſent to each other, and conſequently they will be impelled toward each other by the ſum of the exterior ſhocks which are not compenſated by interior ones. Thus already the idea of attraction vaniſhes before an idea ſimply mechanical. It has been diſcovered, that the velocity with which bodies move toward each other increaſes in an inverſe ratio of the ſquares of their diſtances; and this law will be found perfectly conformable to the proportion of corpuſcles intercepted at different diſtances in the ſyſtem of Mr. le Sage. The ſecond law of gravity, that bodies attract each other in the ratio of their maſs, appears at firſt ſight incompatible with the ſyſtem of Mr. le Sage: but on a cloſer examination it will be found otherwiſe. If a ſecond atom be placed by the ſide of one of the former, the ſingle one will keep off from this as many corpuſcles as it did from the other; whence they will both move towards it with the ſame force as the firſt atom did. But this atom will keep off as many corpuſcles from the ſingle one as its fellow does; whence the ſingle atom will move, in a line intermediated to one drawn from its center to the center

of each, with double the force it had before. This force will inconteſtibly be increaſed exactly in proportion to the number of atoms placed ſide by ſide. It will ſeem a ſpecious objection, no doubt, that in any given maſs many of its component atoms will be in one line, and conſequently on this ſyſtem can act but as one. Yet this objection will vaniſh, if we allow the poroſity of bodies to be ſuch, as Mr. le Sage has demonſtrated it may be, that in a globe as large as the ſun the atoms placed about its center are ſtruck by theſe corpuſcles ſenſibly as much as thoſe on its ſurface; ſo that the quantity of corpuſcles ſtopped in theſe vaſt bodies (whence their gravitation towards each other ariſes) may bear ſo ſmall a proportion to that of the corpuſcles which traverſe it, that the ſame quantity arrives ſenſibly to each of its component atoms, wherever ſituated; and thus gravity may be ſo nearly in the ratio of maſſes, that aſtronomy has not yet been able to diſcover a want of accuracy certainly attributable to a defect of this law. This part of the ſyſtem of Mr. le Sage ſuppoſes, it is true, degrees of littleneſs and velocity of the corpuſcles and of the poroſity of bodies, with ſuch an extent of ſpace, as ſtartle the imagination: but our ideas of magnitude, of velocity, and of time, have nothing abſolute; and as to ſpace, far from being able to aſſign its limits, we conceive the whole univerſe, as far as we have any knowledge of it, however immenſe it appear to our imagination, is but a ſingle point in it.

AN ACCOUNT OF A JOURNEY TO THE TOP OF THE ALPS.

BY MR. DE SAUSSURE.

PHILOSOPHERS and naturaliſts who propoſe to viſit the tops of high mountains, generally take their meaſures in ſuch a

manner as to arrive there about the middle of the day, and when they have reached the intended ſpot, are in too great haſte to make their obſervations, that they may be able to deſcend before night. Hence it happens that they always viſit great eminences almoſt about the ſame hours, and on that account cannot form a juſt idea of the ſtate of the atmoſphere at other times of the day, and eſpecially during the night.

It appeared to me, therefore, a matter of importance to ſupply this deficiency in our atmoſpherical knowledge, by remaining long enough upon ſome great eminence to determine the daily variation of meteorological inſtruments; the barometer, thermometer, hygrometer, electrometer, &c. and to wait for proper opportunities of obſerving the origin of different meteors, ſuch as rain, wind and ſtorms.

This deſire was encreaſed by that of attempting various experiments, which I had reſolved to make upon Mount Blanc; but want of time, and the uneaſineſs I felt from the rarity of the air, prevented me from accompliſhing this part of my deſign.

The difficulty was to find a convenient ſituation. I was deſirous that it might have eighteen hundred toiſes of elevation, and that it might be open on all ſides, in order that the wind, and all other meteors might act in full liberty. I might eaſily have found ſome ſummit covered with ſnow in which all theſe properties would have been united; but it would not have been practicable to raiſe a durable place of ſhelter upon the ſnow, and to make proper obſervations, both on account of the inſtability of the inſtruments, and of the cold and moiſtneſs of the atmoſphere.

It was very difficult to find upon the Alps, at ſo great a height, a rock free from ſnow, acceſſible at the ſame time, and large enough to contain a kind of habitation. Mr. Exchaquer, whom I conſulted upon this deſign, told me, that upon the route newly diſcovered, which conducts from Chamouni to Courmayeur, in paſſing the Tacul, I would find rocks ſuch as I wiſhed for. Truſting to his information, I began, laſt ſpring, to make preparation for this expedition; and in the beginning of June I went with my ſon to Chamouni, to wait for fine weather, and to take advantage of the moment when it ſhould appear. I carried with me two ſmall tents; but I was deſirous to have beſides theſe a ſmall hut conſtructed of ſtone. Several ſeparate places of ſhelter were requiſite, not only for ourſelves and our guides, but becauſe it was neceſſary to keep the mag-

netometer and the variation compaſs apart one from the other, that they might not reciprocally influence each other's variations. I therefore ſent people before to erect a hut of that kind, and when it was finiſhed, and the weather appeared to be ſettled and fine, we departed from Chamouni. The firſt night, July the 2d, we ſlept under our tents at Tacul, which is a plain covered with turf, upon the brink of a ſmall lake, contained between the extremity of the glacier, called the glacier des bois, and the bottom of a rock, known by the name of the mountain of Tacul. Next morning we departed thence, at half after five, and arrived at our hut about half an hour after twelve. To this place I gave the name of the Giant's Neck, becauſe it is really at the entrance of the neck that one begins to deſcend towards Courmayeur, and becauſe the moſt remarkable mountain in the neighbourhood, and that which hangs over this neck, is called the Giant, a high and ſteep ſummit which can be diſtinguiſhed very plainly from the banks of our lake*.

In going from Tacul towards the Giant's Neck, we could not paſs by the glacier of Trelaporte, which our guides had croſſed the year before. As the clefts of this glacier were quite open and free from ſnow, ſo as to render it entirely inacceſſible, we were under the neceſſity of purſuing our route by the foot of a lofty ſummit, called la Noire, paſſing along the edges of very ſteep ſheets of ſnow, on the borders of which were many deep fiſſures. Our guides aſſured us, that this paſſage is much more dangerous than that by which they had gone the year before; I however, truſt very little to aſſertions of this kind, becauſe the preſent danger always appears greater than that which is paſt, and becauſe theſe people think to flatter ſtrangers, by telling them that they have eſcaped great perils. It is however, certain, that this paſſage of la Noire is very dangerous, and as it froze during the night, it would have been impoſſible to paſs hard ſteep ſheets of ſnow, had not our people gone and marked out a path the evening before, while the ſnow was ſoftened by the heat of the ſun.

We were expoſed afterwards, as at Mount Blanc, to the danger of fiſſures concealed by a very thin covering of ſnow; theſe fiſſures became ſmaller and leſs frequent towards the top of the mountain, and we were flattering ourſelves with the hopes of getting clear of them, when all of a ſudden we heard ſome one cry out, ropes, ropes. Theſe were indeed wanted

* The lake of Geneva.

to draw up from the bottom of the glacier, Alexis Balmar, one of the people who carried our baggage, and who being about an hundred paces before us, had ſuddenly diſappeared from amidſt his companions, having fallen into a large fiſſure about ſixty feet deep. Very luckily he was ſtopped about half way down, that is to ſay, at the depth of thirty feet, by a large maſs of ſnow which ſtuck in the fiſſure. As he fell upon the ſnow, he received no injury, but a few ſcratches in the face. His beſt friend, P. J. Favret, immediately made himſelf faſt to a rope, by which he was let down, and having firſt ſent up the load, the two men were drawn up afterwards. Balmar, when he got out, appeared to be a little pale, but he ſhewed no ſigns of emotion; he took upon his ſhoulder our matraſſes, which compoſed his load, and purſued his way, as if nothing had happened.

The moment of our arrival at the end of our journey was not as is uſually the caſe, a moment of ſatisfaction. I ſoon ſaw, and not without ſome degree of chagrin, on comparing the ſituation of our hut, with other eminences which I knew, that its elevation was not eighteen hundred toiſes, as I expected, I found it alſo to be too ſmall, it was only ſix feet ſquare; it was ſo low that one could ſcarcely ſtand upright in it, and the ſtones of which it was conſtructed, were ſo badly joined that the ſnow found a paſſage between them, and had even half filled it. The ridge of rocks upon which we were to erect our tents, and upon the angular point of which ſtood our hut, was encloſed by two glaciers extremely narrow and unequal, and bordered upon every ſide with ſteep ſheets of ſnow, which one might almoſt call precipices. For a habitation of ſeveral days, this ſituation preſented nothing agreeable; but the proſpect from it was truly magnificent. Towards Italy, we had an immenſe extent of horizon, compoſed of ſeveral chains of mountains, partly covered with ſnow, between which, however, we diſcovered ſome foreſts and cultivated valleys. Towards Savoy, Mount Blanc, the Giant, and the intermediate ſummits exhibited a moſt noble view, equally variegated and intereſting.

The people who had carried our baggage and inſtruments, ſet out immediately to return to Chamouni; but I kept, beſides my own ſervant, four of the beſt guides to aſſiſt us in our operations, and to go alternately to fetch coals and proviſions from Courmayeur.

After they had repoſed and refreſhed themſelves I deſired them to begin, and make the arrangements neceſſary for my ſettlement; but ſome remains of their fatigue, and a dread of the inconveniencies which they were likely to endure in ſuch an abode, greatly weakened their ſtrength and damped their courage; however, towards evening, when they began to feel the cold, they were ſenſible that it was time for them to think of providing a place of ſhelter againſt night; they began therefore to arrange the large looſe blocks of granite detached from the rock upon which we had taken up our abode, and to erect tents; for the hut was uninhabitable, until they had cut with pick-axes, and carried away a ſheet of ice, which they found below the ſnow, with which it was half filled.

As for myſelf, I firſt began to inſpect my inſtruments, and to make experiments with thoſe which required no preparation; but I was much diſappointed to find my two barometers deranged; the drought which had prevailed after our departure from Chamouni, had diminiſhed the diameter of the cork which kept in the mercury, ſo that it ran out very faſt from both; but as the air had not got in, I repaired one of them, by employing a remedy pointed out by the cauſe of the evil. I kept it continually wrapt up in wet cloths, and the moiſture having made the cork expand, it then retained the mercury.

Though our accommodation was extremely bad, we ſlept very ſoundly, which reſtored us to our full vigor and activity. In the morning we began with great ſpirit to free our hut from ice, and to raiſe it ſo that we could ſtand upright in it. We conſtructed two pedeſtals for the magnetometers the variation compaſs, and the board upon which we intended to trace out a meridian line, and began to make ſome obſervations. Our guides, who foreſaw a change of weather, exerted themſelves with much aſſiduity to fix our tents properly, which was a very difficult operation, upon a projecting rock, narrower than our tents, being beſides unequal in breadth, and compoſed of large incoherent maſſes.

It was extremely fortunate for us that we took all theſe precautions, for in the night following that between the fourth and the fifth of July, we were attacked by one of the moſt furious ſtorms that I ever remember to have ſeen. About one in the morning, the wind ſprung up from the ſouth-weſt and blew with ſo much violence, that I every moment expected it would have carried away the ſtone hut, in which I and my ſon lay. In this wind there was ſomething ſingular; it was po-

riodically interrupted by intervals perfectly calm, during which we heard it bellowing below us, in the bottom of the valley called l'Allee Blanche, whilſt there was not the leaſt breath of air around our hut. Thoſe calms, however, were followed by ſudden guſts, the violence of which was inexpreſſible; they reſembled repeated diſcharges of artillery, and we even felt the mountain ſhake under our mattraſs. The wind eaſily found a paſſage between the joinings of the ſtones; it once raiſed up the clothes which covered me, and made me imagine that I was froze from head to foot. About the break of day, it became a little calm; but it ſoon reſumed its former violence, accompanied with ſnow, which made its way into every part of our hut. We then took ſhelter in one of our tents, which defended us better. We found there that our guides were obliged to hold the poles continually, leſt the force of the wind ſhould overturn them, and ſweep them away together with the tent. About ſeven in the morning the ſtorm was accompanied alſo with hail and claps of thunder, which ſucceeded almoſt without interruption, one of which was ſo near us, that we diſtinctly heard an electric ſpark, which with a ſnapping noiſe glided along the wet canvas that covered our tent exactly behind the place where my ſon lay. The air was ſo filled with electricity, that as ſoon as I had placed without the tent, the point only of the conductor of my electrometer, the balls diverged as much as the threads would permit them, and almoſt at every clap of thunder, the electricity, from being poſitive, became negative, or from being negative, poſitive. To convey a proper idea of the violence of the wind, it will be neceſſary only to obſerve, that our guides being twice deſirous of fetching ſome proviſions from the other tent, choſe for that purpoſe thoſe intervals when the wind ſeemed to be a little abated; but about half way, though the diſtance from the one tent to the other was not above ſixteen or ſeventeen paces, they were attacked by ſuch a furious guſt, that to ſave themſelves from being carried over the precipice, they were obliged to cling to a rock which was luckily in their way, where they remained two or three minutes with their clothes blown over their heads, and expoſed to a dreadful ſhower of hail, before they could venture to quit their hold.

About noon the ſky became clear, and Mr. Exchaquer, who the evening before had come with four guides to pay us a viſit, and who had ſhared with us the ſeverity of the night and of the

ſtorm in the morning, embraced that opportunity of favourable weather to return to Courmayeur.

As for us we were very well ſatisfied to find that with our wretched ſhelter we had been able to reſiſt the elements united, and being firmly perſuaded that it was almoſt impoſſible we ſhould meet with worſe weather, we found ourſelves quite ſecure againſt the fear of thoſe ſtorms, which had been repreſented to us as very dangerous upon ſuch eminences. We continued, therefore, with great ardor to make every diſpoſition neceſſary for obſervations; and we began next morning a regular and uninterrupted ſeries. When the weather was not too bad, my ſon aroſe at four in the morning to commence his meteorological obſervations. I did not get up till ſeven; but to make amends, I watched till midnight, while my ſon went to bed at ten. In the day time each of us had his ſettled occupations.

This active manner of life made the time paſs with the greateſt rapidity; but we ſuffered much from the cold during bad weather, and in the greater part of the evenings, even when the days had been fine. Every evening, almoſt, about five o'clock a wind aroſe which blew from declivities covered with ſnow that hung over us to the north and eaſt. This wind, often accompanied with ſnow or hail, was prodigiouſly cold, and incommoded us much. The warmeſt clothes, even furs, could not ſecure us from it. We could not light a fire in our ſmall tents, and our wretched hut, the apertures of which admitted the light, could not be made warm by the fire of our ſmall ſtoves; the air was ſo much rarified that the coals burnt but very feebly, even when we uſed a pair of bellows, and if we at length were able to warm our feet and the lower part of our legs, our bodies always remained cold on account of the wind which penetrated our habitation. During theſe moments we leſs regretted that we were at the elevation of 1763 toiſes above the level of the ſea; for higher the cold would have been much more ſevere: beſides we comforted ourſelves when we reflected that we were 180 toiſes higher than the ſummit of Buet, which was reckoned ſome years ago the higheſt acceſſible part of the Alps.

About ten in the evening, when the wind became calm, having ſuffered my ſon to go to ſleep in the hut, I repaired to the tent where my compaſs was, and having wrapt myſelf up in my furs, and put a warm ſtone under my feet, I began to write out a fair copy of the obſervations which I had made in

the courſe of my journey. I occaſionally went out to obſerve my inſtruments and the ſtate of the heavens, which appeared then for the moſt part perfectly pure and ſerene. After theſe two hour's retirement and contemplation, which were exceedingly pleaſant, I went to reſt in the hut upon a ſmall mattraſs, ſpread out on the ground near that of my ſon, where I enjoyed a much ſounder ſleep than ever I did in my own bed when at home.

The ſixth and laſt evening which we paſſed upon the Giant's Neck was moſt delightful and charming. It appeared as if theſe lofty ſummits wiſhed that we ſhould quit them with regret. The ſharp wind which had rendered the greater part of the evenings ſo cold, did not then blow; the ſummits which hung over us, and the ſnow which lay between them were tinged with the moſt beautiful ſhades of roſe-color and crimſon; the whole horizon of Italy ſeemed to be edged with a broad purple border, while the full moon, riſing majeſtically above this border, and appearing of a deep red color, ſtill added to the grandeur of this magnificent ſcene. The atmoſphere which ſurrounded us, had the ſame purity and perfect ſerenity, as Homer aſſigns to that of Olympus; but the valleys, filled with vapors which had been there condenſed, appeared to be the abode of obſcurity and darkneſs.

But how ſhall I deſcribe the night which ſucceeded that beautiful evening, when, after the twilight, the brilliant moon from the heavens diffuſed floods of ſilver light over the vaſt circumference of ſnow and rocks which ſurrounded our ſmall habitation? What an aſtoniſhing and delightful ſpectacle did the ſheets of ſnow and ice, the ſplendor of which is inſupportable when the ſun ſhines, exhibit, by reflecting the mild rays of the lamp of night! What a magnificent contraſt did the duſky rocks of granite, cut out by the hand of nature with ſo much boldneſs, form in the midſt of the brilliant ſnow! What opportunity for meditation! For how many pains and privations do not ſuch moments indemnify us! The ſoul is elevated, the mind ſeems to be enlarged, and amidſt that majeſtic ſilence we think we hear the voice of nature, and that we are admitted to behold her moſt ſecret operations. The next morning July the 19th, as we had finiſhed our intended experiments and obſervations, we quitted our ſtation, and deſcended to Courmayeur. The firſt part of the deſcent, which is over incoherent rocks, is very ſteep and laborious, but attended with no danger, and in this reſpect it has no kind of reſemblance to that of *l'Aiguille-*

du Goute, to which it has been compared. At the bottom of theſe rocks you enter ſome meadows, and below theſe you find woods, and afterwards cultivated fields, through which you arrive at a Courmayeur. In all this route there is no difficulty. We, however, ſuffered much there on account of the heat, which to us, who had come from a cold climate, to which we had been for ſome days habituated, appeared to be inſupportable; but we ſuffered more from hunger, as our ſtock of proviſions which we had reſerved for this ſmall journey, diſappeared during the night. We ſtrongly ſuſpected that ſome of our guides had made free with them, not ſo much for their value, but that we might be ſooner induced to return. They were much tired with remaining upon the Giant's Neck; and our admiration of the laſt evening, notwithſtanding the impatience of my ſon, made them fear that we wiſhed to prolong our ſtay. The heat and want of ſuſtenance had deprived me of my ſtrength, threatened to bring on fainting, and affected my head ſo much that I could not find words ſufficient to expreſs my thoughts. My ſon and my domeſtic ſuffered alſo, but in a much leſs degree. Though my weakneſs retarded our progreſs, and by theſe means kept me at a diſtance from relief, we at length arrived about ſeven in the evening at the village of Entreve, where we found the firſt houſes in which we could get any thing to eat. After a day's repoſe at Courmayeur, which perfectly reeſtabliſhed me, we again ſet out, and paſſing through Col-Ferret to Martigny, and thence to Chamouni, where we ſtaid three days to make ſome experiments, and compare them with thoſe made upon the Giant's Neck, we returned to Geneva at the end of July.

SOME ACCOUNT OF THE GRISGRIS AND MUMBO JUMBO, SUPERSTITIONS PRACTISED IN MANY OF THE INTERIOR COUNTRIES OF AFRICA.

OF all the ſuperſtitions in vogue in ſeveral of the interior countries of Africa, the moſt general and remarkable are the

Grifgris and Mumbo Jumbo; the former of which, Le Maire fays, are certain Arabic characters, mixed with necromantic figures, drawn by the Marbuts, (the prieſts ſo called) on paper. Labat affirms, that they are nothing more than ſcraps of the Koran in Arabic; but this Barbot denies, and confirms his opinion by poſitive proofs; for having brought over to Europe one of theſe Griſgris, and ſhewn it to a number of perſons deeply ſkilled in the Oriental learning, none of them could find the leaſt trace of any character they underſtood; yet, after all, this might be owing to the badneſs of the hand writing, and the words are probably of the Mandingo language, though the characters are an attempt to imitate the Arabic. The pooreſt negro never goes to war without his Griſgis, as a charm againſt wounds; and, if it proves ineffectual, the Marbut transfers the blame on the immorality of his conduct. Thoſe cheats invent Griſgris againſt all kinds of dangers, and in favour of all deſires and appetites; by virtue of which, the poſſeſſors may obtain or avoid whatever they like or diſlike. They defend them from ſtorms, enemies, diſeaſes, pains, and misfortunes; and preſerve health, long life, wealth, honour, and merit, if we credit the Marbuts. Certain it is, that thoſe prieſts find all the benefit of the boaſted virtues of their Griſgris: no clergy in the globe being more revered, honoured, or wealthy, according to the ideas of wealth they entertain here; and no wonder, as they impoveriſh the people by the exorbitant price they exact for their knaviſh charms, a Griſgris being frequently valued at three ſlaves, and four or five oxen.

Such of theſe pious ornaments as are intended for the head, are made in the form of a croſs, reaching from the forehead to the neck behind, and from ear to ear; nor are the arms and ſhoulders neglected. Sometimes they are planted in their bonnets in the form of horns, at other times they are made like ſerpents, lizards, or ſome other animal, cut out of a kind of paſte board: In a word, they are of forms as various as the purpoſes for which they are intended. There are not wanting Europeans, and otherwiſe intelligent ſeamen and merchants, who are in ſome degree infected with this weakneſs of the country, and believe that the negro ſorcerers have an actual communication with the devil, and that they are filled by the malignant influence of the evil ſpirit, when they ſee them diſtort their features and muſcles, make horrid grimaces, and at laſt imitate all the appearance of epileptics: A notion not confined to the negroes of Africa, but thoroughly believed, about the beginning of

the laſt century, by ſeveral of the learned of Europe, and borrowed by them from the antients, who believed that perſons afflicted with this terrible malady were poſſeſſed with a *quid divinum*, or ſpirit. Here, indeed, it is counterfeited, but ſo artfully, that it is next to impoſſible to detect them, and hence they gain great credit with the natives.

To theſe charms and necromantic arts they add the other bug-bear of Mumbo Jumbo, which is intended, chiefly among the Mandingoes, to keep their women in obedience and ſubmiſſion. This is no other than a large idol, which the women are ſimple enough to believe, or cunning enough to pretend, they take for a human ſavage, who watches all their actions, and can even penetrate into their moſt ſecret thoughts. The huſband gets behind this ſtatue in the night, and makes a dreadful bellowing, which they ſuppoſe iſſues from the idol; and of this ſome of them make a very artful uſe; for, perſuading their huſbands that they firmly believe in the attributes given to the Mumbo Jumbo, their conduct is intirely committed to his care; the huſband takes his pleaſure abroad, and the women enjoy the ſociety of their gallants, free from all alarms and diſcoveries. Some of them, are, however, ſimple enough to credit what their huſbands aſſert, and then they try to bribe over the idol to favour them. Moore relates, that this part is acted by a negro, and commonly by the favourite ſlave of his maſter; hence he acquires an abſolute dominion in the family over the women, in conſequence of his function; and over the maſter, from an apprehenſion that ill uſage will make him reveal the ſecret of ſo much conſequence to the ſupport of the huſband's authority, and preſervation of the women's honour.

In the year 1727, the King of Jagra had a woman, whoſe curioſity could only be equalled by his weak fondneſs, in diſcovering to her the whole myſtery of the Mumbo Jumbo, for which ſhe had long eagerly ſollicited; but, with the indiſcretion uſual in her ſex, ſhe was ſcarcely in poſſeſſion, when ſhe haſtened to reveal it to all the other women. The report ſoon came to the ears of the chief negro Lords, who were before but ill affected to the King's perſon, and now ſhocked with a weakneſs of ſuch conſequence to them all. They therefore aſſembled to deliberate on the neceſſary meaſures, in an affair ſo critical; and not doubting but their women would throw off their allegiance, and live in a perpetual ſtate of rebellion and infidelity, if the terror of the Mumbo Jumbo was once removed, they determined upon a very bold ſtep, which they executed with equal reſolu-

tion. They assumed that air of authority peculiar to persons who take upon them a religious office, or act in a religious cause; and, going to the palace, ordered the King to come before the idol or Mumbo Jumbo. The weak Prince, not daring to refuse the summons, obeyed, and, after being severely censured by the bug bear, he was ordered to produce all his women. No sooner had they made their appearance, than they were instantly assassinated by order of the Mumbo Jumbo, and thus this almost fatal discovery was suppressed, before it made its way out of the King's family.

Such as are initiated in the mystery of the Mumbo Jumbo take a solemn oath not to reveal it to the women, or any other negroes who are not of the society. They cannot be admitted before a certain age; the people swear by that idol, and no oath is observed with more solemnity and respect.

A SHORT

HISTORY OF AGRICULTURE.

AGRICULTURE is one of the most ancient as well as the most useful of all the arts; and it appears that it owes its origin to mankind uniting together in society. The first inhabitants of the globe were probably not acquainted with any other method of nourishing themselves than with the fruits which they collected at the roots of trees. As they increased in number, they found it necessary to have recourse to aliments of some other kind. Those who frequented the borders of the sea, lakes, and rivers, applied themselves to fishing, and those who resided in the neighbourhood of forests, employed their time in hunting animals, the flesh of which supplied them with food. But when societies were formed, they thought of procuring a subsistence more certain, and of a more agreeable nature. They tore up, therefore,

in the foreſts, the trees, the fruits of which had been found moſt palatable, and cultivated them around their habitations. The vine was propagated, and the earth received in its boſom the ſeeds of ſuch plants as had been remarked to be diſtinguiſhed by their nutritive qualities. Obſervation, induſtry, and neceſſity, ever ingenious, contributed to bring their firſt attempts to perfection, and thus agriculture ſoon became an art.

According to the Scriptures, mankind in the earlieſt ages of the world gave themſelves up to agriculture. The caſe was the ſame after the flood, and the cultivation of the earth was the ſole employment of the patriarchs. Enured to labor, and ſtrengthened by the continual exerciſe of temperance and ſobriety, they were ſubject to few infirmities; the ſource and cauſe of which is too often to be found in idleneſs and luxury. The earth, cultivated by their care, and that of their children, produced abundant crops, and their flocks and herds encreaſing, covered the fertile plains.

It is well known, that the inhabitants of Meſopotamia and Paleſtine applied themſelves to the cultivation of the earth in the moſt remote periods. Ozias, king of Judah, had a great number of labourers and vintagers upon the mountains of Carmel.

The Aſſyrians, the Medes, and the Perſians, followed agriculture alſo. According to Beroſus, it was ſo ancient, that it might be traced back to the firſt ages of their hiſtory. The Egyptians, who pretended to have a divine origin, gave Iſis the honor of diſcovering corn, and they aſcribed to Oſiris the invention of the plough, and of the cultivation of the vine. It cannot be denied, that agriculture was very ancient in Egypt, ſince, according to ſacred hiſtory, Abraham retired thither during the time of a famine, and Jacob, on the like occaſion, ſent his ſons to the ſame place to purchaſe corn in that country. Agriculture was always held in great honor.

As there is no people on earth who carried induſtry, labor and ingenuity, farther than the Egyptians, there are none who were better acquainted with the ſources of happineſs and proſperity. They knew that agriculture was the firmeſt ſupport of a ſtate, and the eſſential means to preſerve the immenſe population of their dynaſties, ſo that this art amongſt them formed a particular object of their polity, and of the attention of government. It cannot be doubted, that the great love which the Egyptians had for the ſciences, and above all for agriculture, gave riſe to

learned works on this ſubject. It is probable, that there were a great number of treatiſes reſpecting agriculture in the libraries of Memphis and Alexandria, but thoſe libraries were unfortunately deſtroyed.

The Greeks, imitating the Egyptians, who made gods of every thing that excited their aſtoniſhment, thought Ceres to be the goddeſs of corn; but, according to Polydore Virgil, the Greeks claimed the invention of many things which they had been taught by the Egyptians. It will be ſufficient to recur to the firſt ages of their hiſtory, to be convinced that agriculture was not even known in Greece, when it had made conſiderable progreſs among the Phoenicians, the Midianites, and the Egyptians. After having travelled through Egypt, the Greeks introduced into their country the uſe of the plough. Their taſte for agriculture encreaſing all their political views were directed towards that branch of public economy; and the Grecian philoſophers, renowned for the wiſdom of their legiſlation, made regulations reſpecting this object, which is ſo eſſential to the proſperity of an empire. Athens and Lacedemon became in a little time two flouriſhing cities, and it was to the art of tilling the earth, that they were indebted for their elevation.

Ariſteus of Athens, was the firſt perſon who cultivated the olive, and invented a method of extracting oil from it. To the Athenians, we are indebted for the fig tree: the ſame people brought at different times quince trees from the iſland of Crete, cheſnut trees from Sardis, peach and walnut trees from Perſia, and lemon trees from Media. All theſe foreign productions, and many others, have, by means of the Greeks, been tranſmitted to us. The Romans, having conquered Greece, tranſported to Italy all the trees which they found there. We muſt refer to that period the introduction of olives at Rome; ſince, according to Feneſtella, none of them had been ſeen either in Italy, Spain, or even Africa, under the reign of Tarquin. It is much to be doubted, whether the almond tree was known in Italy in the time of Cato, and if it was not carried thither after the conqueſt of Greece. It is certain, that the cherry tree was unknown there in the year 680, after the building of the city, and that Lucullus brought it from Pontus after the defeat of Mithridates. The firſt piſtachio trees were brought from Syria by L. Vitellius, under the reign of Tiberius.

In thoſe happy times, when the Greeks thought of nothing but cultivating their fields, and cauſing agriculture to flouriſh,

they became formidable and powerful. Their enemies no longer dared to attack them; but this glory was only of ſhort duration. The ornamental arts ſoon aſſumed the place of agriculture, ſo much that the magiſtrates were obliged to tranſport corn from foreign countries. This decline haſtened the ruin of Greece.

The Romans honoured agriculture in a ſingular manner. Romulus, Numa, and Ancus Martius, recommended nothing ſo ſtrongly to the people as the cultivation of their lands, and the care of their flocks. The ruſtic tribes formed at Rome the firſt order of citizens; and, in the happieſt periods of the Republic, the ſenators came from the fields to the ſenate houſe, in order to deliberate on the moſt important affairs. L. Quintius Cincinnatus and Attilius were employed, the one in labouring, and the other in ſowing his field, when they were ſent for to become chiefs of the republic. The latter was elected conſul. The firſt, created dictator at a very critical conjuncture, quitted his rural inſtruments, came to Rome, which he entered amidſt the acclamations of the people, put himſelf at the head of the army, vanquiſhed his enemies, and returned ſixteen days after to his country houſe, to reſume his uſual functions. The ambaſſadors of the Samnites having come to offer a large ſum of gold to Curius Dentatus, found him ſeated near his fire, where he was boiling ſome beans, and received from him the following ſage reply: "Gold is not neceſſary to him who can content himſelf with ſuch a repaſt, and who thinks it nobler to conquer thoſe who have gold than to poſſeſs it." This illuſtrious Roman had thrice received the honour of the triumph.

Whilſt agriculture was held in eſtimation Rome coutinued to flouriſh. "The exerciſe of that laborious life," ſays Pliny, "formed thoſe men, who diſtinguiſhed themſelvee ſo much in the military art, but luxury having afterwards given a fatal blow to agriculture, ſoon completed the ruin of the republic."

Gaul, it is certain, was cultivated very early. The great population of that country, which obliged the inhabitants to ſend colonies to Germany and the South, and the facility with which Ceſar found ſubſiſtence for his troops, all announce that it produced abundance of corn. The Romans, who were well acquainted with the art of profiting by their conqueſts, ſpared no pains to advance the progreſs of agriculture in Gaul. The conſiderable expences which they beſtowed on it rendered it the moſt fertile and beautiful of their provinces. This ſource of

riches was, however, deſtroyed, when the northern barbarians ravaged the empire, and was not re-eſtabliſhed till a long time after.

Under the firſt race of the French kings agriculture was in a very languiſhing condition, but it acquired ſome vigour in the beginning of the ſecond race, a period, when the Monks applied themſelves to cultivate the earth with a zeal and knowledge, the good effects of which have been ever ſince experienced. The reign of Charlemagne, during which every thing aſſumed a new form, raiſed agriculture to a high degree of ſplendor, but it was not of long duration, for the invaſion of the Normans and the feudal ſyſtem, plunged France for a ſeries of years into ignorance and barbarity. The kings of France, however, gradually made regulations in favour of the huſbandmen, which rendered their ſituation much better. Thoſe of Francis I. Henry III. Charles IX. and Henry IV. were confirmed by their ſucceſſors. Lewis XIV. added new ones, dictated by that enlightened ſpirit which began to prevail in his reign; but under Lewis XV. a fondneſs for agriculture becoming general amongſt all ranks, this art made a moſt aſtoniſhing progreſs. Men of letters did every thing in their power to contribute towards bringing it to perfection; chemiſts, botaniſts, philoſophers, and naturaliſts, all directed a part of their reſearches towards this object, and we have great reaſon to hope that it will continue to be encouraged ſtill more and more in every country.

THEATRICAL BIOGRAPHY.

Mrs. Siddons.

ESTABLISHED habits are with difficulty removed. When the human mind once uſurps the poſſeſſion of a certain train of ideas, it generally retains its bias, and they continue to flow on, in the channel of prejudice, with little interruption

from the feeble efforts of liberality and candour. Mankind in general deprecate the toil of reaſoning; the portion of thoſe who think for themſelves is comparatively very ſmall. The multitude are content to adopt without diſcuſſion, and conſequently to approve without judgment, and cenſure without reaſon.

There is a certain degree of ridicule attached to the profeſſion of a Player, that the mind ſeems incapable of reſiſting; and which, all the powers even of Garrick, Mrs. Jordan, or Mrs. Siddons, cannot altogether remove. In darker ages they have been conſidered as the foes of religion, and condemned by the anathemas of the church; the liberality of the preſent has removed every obſtacle of this ſort, and even honoured ſome of its profeſſors with marks of diſtinction, the more honorable as they are more rare.

The mother of Mrs. Siddons was the daughter of a Mr. Ward, the manager of an itinerant company of players in Wales, and the adjacent Engliſh counties, who by ſucceſs and economy made a ſmall fortune. The preſent Earl of Coventry, then a youth, is ſaid to have been ſo much ſtruck with her charms, that he ſent her letters, with an offer of marriage, which ſhe gave to her father, and the father to the late Earl, by which means it was prevented.

So great it ſeems was Mr. Ward's contempt for his profeſſion that he laid his daughter under the ſtrongeſt injunction of never marrying a man on the ſtage; but weak are parental counſels in oppoſition to the power of the *fecundating* little god.—The firſt ſight of Mr. Roger Kemble, who travelled with the company in the character of hair dreſſer, ſo wrought upon the ſuſceptible heart of Miſs Ward, that before it was known they loved, they were ſecretly married. Papa was outrageous, and it only remained for Mr. and Mrs. Kemble to enter a ſtrolling company in Cheſhire and Lancaſhire.—Here the preſent Mrs. Siddons was born. Parents ſometimes relent—The pride of the mimic monarch gave way to the feelings of nature. After a few years peregrination, they were invited back by Mr. Ward, who reſigned the theatric ſceptre to Mr. Kemble, and died ſoon after.

When Miſs Sarah Kemble, (now Mrs. Siddons) firſt attempted the ſtage, her juvenile efforts, particularly as a ſinger, were regarded with ſome hopes of ſucceſs; but ſhe very early abandoned that line, and attended in particular to tragedy.

The viciſſitudes of all human affairs are well repreſented in theatric life.—Here we ſee monarchs ſuddenly dethroned, and ſucceeded by the moſt menial offices. Miſs Kemble being refuſed the indulgence of her paſſion for Mr. Siddons, actually reſigned her ſituation, and hired herſelf as lady's maid to Mrs. Greathead, of Guy's Cliffe, in Warwickſhire, at 10l. per annum.

At the end of a twelve month, however, thoſe two powerful paſſions—love and ambition—would be reſtrained no longer. Mr. Siddons eloped with her to Chamberlain, and joined Crump's company, where he married her.

This was a new eſtabliſhed company, and rather unſucceſsful: and ſuch was the poverty of their wardrobe, that Mrs. Siddons was obliged, during the performance of the Iriſh Widow, to borrow a coat of a gentleman in the boxes, to equip herſelf for the Widow Brady, which ſhe obtained on condition that ſhe gave him her petticoat to put over his ſhoulders, and admitted him to ſtand behind the ſcenes.

Mrs. Siddens's talents were even at this period, allowed to ſurpaſs mediocrity, and her application was inceſſant. From hence ſhe was engaged, with her huſband, by the late Mr. Younger, to perform at Liverpool, Birmingham, &c. where, after remaining a few years, encreaſing both in profits and reputation, ſhe was invited to Drury Lane, where ſhe performed the parts of Mrs. Strickland, and the Queen in Richard III. but being conſidered only as a ſecond Actreſs on a London theatre, her ſtay was very ſhort. Some have imputed this to Garrick's jealouſy of all merit but his own; but the ſuppoſition does too much violence to common ſenſe, to be admitted for a moment.

From London Mrs. Siddons went to Bath, without much hope, it is preſumed, of ever reaching any very pre-eminent ſtation; but extreme parſimony enabled her to ſupport her family on a very ſmall ſalary. Here, however, ſhe evidently improved, and is ſaid to have been greatly aſſiſted by the inſtruction of Mr. Prat, who has written ſo much under the ſignature of Courtney Melmoth. About the year 1780, ſhe had attained that degree of excellence, that many *amateurs* travelled to Bath purpoſely to ſee her.

In 1781, Mrs. Siddons had the honour of numbering among her patrons, the Ducheſs of Devonſhire, and Mr. Whaley the poet, whoſe admiration of her abilities obtained er an engagement at Drury-lane Theatre, at 10l. per week; upon which ſhe

left Bath, after ſpeaking a very pretty addreſs, written by herſelf, and in which ſhe produced her three children, as the three reaſons for her quitting ſuch generous patrons.

Her ſecond appearance at Drury Lane was on the 10th of October, 1782, in the character of Iſabella. This is her greateſt character, and ſhe certainly aſtoniſhed the houſe, by a diſplay of powers not witneſſed ſince the days of Garrick

Her fame was inſtantly founded through the metropolis with ſuperlative eulogium. The theatre over flowed every night ſhe appeared, and Melpomene, who had been puſhed behind the curtain by the ſatire of Sheridan's Critic, reſumed her former conſequence and ſtation. It became faſhionable for all the ladies to weep, and ſometimes to faint. The ſums drawn into the treaſury exceeded the receipts of any former ſeaſon, and the managers, by way of return, gave her an extra benefit, and doubled her ſalary.

Anxious that her relations might participate in her good fortune, Mrs. Siddons brought her ſiſter, Miſs F. Kemble, to London, and announced her for Alicia, to her own Jane Shore. It is impoſſible to deſcribe the eagerneſs with which crowds flocked to ſee this performance. Judging of Miſs Kemble by the talents of her ſiſter, the public expected another phenomenon, and the avenues to the theatre were gorged with people by three o'clock. The ſcreams of women, and the general confuſion which enſued when the doors opened, occaſioned a very unpleaſant ſcene. Many were lamed, many had their pockets picked, and thouſands were excluded the houſe. But they had no reaſon to regret this diſappointment, as the new Alicia was even below mediocrity, Miſs Kemble remained but a few ſeaſons on the ſtage, when ſhe married Mr. Twiſs, a gentleman of fortune and ſome literary ability, with whom ſhe retired.

The managers of Drury Lane, willing to compliment and reward a woman whoſe powers proved as profitable as the philoſopher's ſtone, gave Mrs. Siddons a benefit before Chriſtmas. Venice Preſerved was ſelected for the play; and a more ſplendid or crouded audience, perhaps, never graced a theatre. Great part of the pit was laid into boxes; the preſents given for tickets by the nobility and gentry were immenſe; and counſellors Pigot and Fielding began a ſubſcription among the gentlemen of the bar, which amounted to an hundred guineas, preſented it to Mrs. Siddons, as a ſmall acknowledgment for the pleaſure and inſtruction her talents had given them: to the former of whom Mrs. Siddons ſent the following letter.

" Sir,

" I cannot ſuppreſs my deſire of wiſhing you to take upon you the charge of making my moſt grateful acknowledgements to thoſe gentlemen who have done me the honor of diſtinguiſhing my poor abilities in ſo elegant a manner. Believe me, Sir, my heart is too full, and my pen too feeble, to [illegible] what would become me on this moſt ſhining circumſtance of my whole life. The gentlemen of the Bar have given me a conſequence I never felt before, and I have juſt reaſon to fear the effects of the approbation of ſo eminent a body. But in all things I will do my beſt to merit that moſt honorable diſtinction which my generous patrons have thought proper to ſhew me, and to prove myſelf at leaſt not inſenſible of the value of their countenance and protection. I have the honour to be, with great reſpect and gratitude,

" Sir,
" Your moſt obliged
" And obedient Servant,
" S. SIDDONS."

This was an honor unparalleled in theatrical annals; and indeed the benefit was, perhaps, the moſt lucrative ever known.

In the ſummer ſhe performed in Ireland; and her firſt appearance at Drury Lane in September 178[illegible], was commanded by their Majeſties. Beſides an uncommon ſhare of royal countenance, ſhe proved equally attractive this ſeaſon as the preceding. When the vacation again came round, ſhe again went to Ireland, and from thence to Edinburgh, where ſhe received one thouſand pounds for performing ten nights. Her fame circulated throughout the kingdom, induced many to travel from the moſt diſtant parts of it to ſee her! and ſuch was the effect of her repreſentations, that innumerable preſents of different kinds were ſent to her from unknown hands: but the moſt magnificent was a ſilver urn, which was conveyed to her after ſhe arrived in London, with the words "*A Reward to Merit*," engraven on it.

During all this ſunſhine of good fortune, however, a ſtorm was brewing in the metropolis. The envy of a competitor may be forgiven:—but what can be ſaid in defence of thoſe who repine at the ſucceſs of the meritorious, without the excuſe of rivalſhip?—It is a crime of the blackeſt and moſt unpardonable nature.

A perſon employed in a newſpaper, whoſe writings have been juſtly deſcribed to be "every line a libel, and every word a lie," becauſe, perhaps, Mrs. Siddons would not comply with his extortions, or ſooth his viperous tongue by the hoſpitalities of her table, ſet every engine in motion againſt her:—He loaded her with opprobrium for not alleviating the diſtreſſes of her ſiſter, Mrs. Curtis, a vicious woman, who would not conform to modeſty, though offered a genteel annuity on that condition. This lady read lectures in Doctor Graham's Temple of Health, at which decency would have bluſhed; and notwithſtanding ſhe diſgraced her relations in many reſpects, ſhe expected their countenance and ſupport. With a view of forcing them to accede to her demands, from the dread of public indignation, ſhe ſwallowed poiſon in Weſtminſter Abbey, which probably had the deſired effect, as without proving mortal, it furniſhed a ſubject of detraction againſt her ſiſter.

The paragraphical aſſaſſin, in addition to the preceeding circumſtance, repreſented Mrs. Siddons as extremely avaricious and uncharitable:—that ſhe had taken a large ſum from Mr. Digges, a once eminent, but then diſtreſſed comedian, for performing on his benefit night in Dublin:—that ſhe had been guilty of a ſimilar crime to Mr. Brereton: and that her whole conduct was replete with meanneſs and inhumanity. To irritate his newſpaper brethern, too, he reported that ſhe never read their publications, and equally deſpiſed their panegyric or their cenſure; until by invidious falſehoods, induſtriouſly circulated, honeſt John Bull was very clamorous againſt his favorite actreſs; and many candid people credited theſe aſſertions, while they remained uncontroverted.

The houſe was crouded on the night of her firſt appearance in October, 1784; but when the curtain drew up and diſcovered her as Mrs. Beverly in the Gameſter, ſhe was ſaluted with violent hiſſing, and a cry of *off! off!* intermixed with applauſe. She attempted to ſpeak, but could not be heard; and Mr. Kemble, indignant at the inſults offered her, and conſcious of her innocence, led her off the ſtage.

This excited the vociferations of her friends for her return; and after the tumult had continued for about an hour, her enemies began to relax; and ſilence being obtained, ſhe came forward;—declared her innocence of what ſhe was accuſed with:—that the allegations would ſoon be refuted;—and that her reſpect for the public made her confident they would protect

her from inſult. The play was then ſuffered, with very little oppoſition, to go on.

During the whole of this riot Mrs. Siddons acted with great compoſure and fortitude. Her huſband, in a ſpirited manner, proved the charges reſpecting Digges and Brereton to be falſe; and ſome elegant, nervous letters, inſerted in a newſpaper, ſigned Laertes, ſuppoſed to be written by Mr. Kemble, operated powerfully in her favor. But ſtill the author of the diſturbance was ſpreading his venom, and creating ſtories of her parſimony; while to his confidents he would whiſper with great joy, "You ſee what a noiſe I've made!"

The conduct of Mrs. Curtis ſufficiently juſtified Mrs. Siddons's reſentment; and Mr. Brereton, by not coming forward in vindication of a woman to whom he was obliged, was generally blamed. The public ſoon ſaw the infamy of the whole tranſaction, and received her with double kindneſs.

The authors of this malignant conſpiracy, however, had nearly accompliſhed their deſign. The object of their enmity, diſguſted at a public life ſo liable to be embittered by the miſtake of the multitude, or the combinations of the miſchievous, was on the eve of retiring into Wales, on a few thouſand pounds which ſhe had ſaved during the two preceding ſeaſons;—nor was it until the exultations of her enemies at ſuch an event, were fully repreſented to her, that ſhe agreed to brave the ſtorm.

Thus were the admirers of the drama on the brink of loſing its brighteſt ornament by the machinations of a villain and their own credulity. Juſtice, however, triumphed over malignity:—the temporary cloud of popular deluſion ſuddenly evaporated, and our heroine ſhone again with increaſed luſtre. Theatrical amateurs, ſenſible of the injury ſhe had ſuſtained, were eager to ſhew their contrition, by the moſt frequent tokens of approbation; and ſhe had more cauſe of rejoicing than regret at the futile attempts on her fame.

Their majeſties about this time paid her many compliments. She was frequently invited to Buckingham houſe, and to Windſor, where ſhe ſometimes recited plays, accompanied by Mr. Kemble; and for ſeveral years ſhe had to boaſt of a greater ſhare of royal patronage than any of her predeceſſors.

A great man was ſo much charmed with her, that a *carte blanche* was offered and rejected. This Mrs. Siddons told to ſome friends, which coming to the knowledge of a great lady, any further intimacy was declined; nor has the decree been yet revoked.

At the concluſion of laſt ſeaſon, Mrs. Siddons finding her power of attraction on the wane, reſolved on retiring from the London ſtage, until by abſence her abilities might regain their wonted allurements. She did not, however, retire from a theatrical life, but performed in Weymouth, Plymouth, Liverpool, &c. &c. where here profits were conſiderable, but where her ſuperior talents have left an impreſſion that will for a long time cauſe the exertions of the itinerant players to be received with coolneſs; and conſequently abridge their ſmall emoluments.

In the beginning of the winter ſhe viſited her friend, Mr. Whalley, at Bath, where it was her deſign to perform for a few nights, but the regulations of that theatre would not permit it. From thence ſhe went to her worthy patrons, Lord and Lady Harcourt, at Neunham, and reſided there a few weeks; but on being ſeized with a very ſerious indiſpoſition, ſhe returned to her houſe in London.

By her emoluments ariſing from the theatre, and the numerous and valuable preſents of the nobility and gentry, which ſhe has received in all the principal towns in the three kingdoms, ſhe has realized a handſome fortune. She keeps a carriage, and an elegant houſe in Gower ſtreet, Bedford ſquare; and it is ſaid that ſhe has mortgages to a very large amount on Drury lane Theatre.

She is reſpected, and admitted on familiar terms by many noble families. From her infancy ſhe has been remarkably prudent; nor has her moſt inveterate enemy ever ſuſpected her continence. She is bleſſed with great domeſtic happineſs; and her eldeſt ſon, Maſter H. Siddons, has lately ſhewn a pretty turn for poetry.

The theatrical talents of Mrs. Siddons have ſo often been the ſubject of eulogium, and the public is ſo well acquainted with them, that it were ſuperfluous to enlarge on her merits here. Nature has beſtowed upon her a perſon, a countenance, a voice, and an underſtanding competent to depict, in the moſt vivid colours, the moſt beautiful ideas of any tragic poet. The flexibility of her features, the expreſſion of her eyes, and the graceful dignity of her deportment, cannot poſſibly be excelled; nor has any performer ever ſhewn more judgment in delivering the ſenſe of the author, or in dreſſing characters with propriety. If the ſmalleſt fault can be diſcovered, it is ſometimes too much violence in her action.

The tenderneſs of Belvidera, the pride of Caliſta, or the grief of Iſabella, are moſt happily pourtrayed by Mrs. Siddons. Her

manner of pronouncing "*Remember twelve,*" in the firſt mentioned part, is moſt beautifully expreſſed, and never is heard without the warmeſt burſts of applauſe. Whatever were the powers of her pedeceſſors, it is ſcarcely poſſible that they could be ſuperior, if equal, to her own; and at the preſent time ſhe is indiſputably the firſt tragic actreſs in Britain—perhaps in the world.

On ASCRIBING the INTELLIGENCE on MAN to his FORM; and the EFFECTS of CLIMATE on HIM.

FROM ST. PIERRE'S STUDIES OF NATURE.

MAN, it has been ſaid, owes his intelligence to his hands: but the monkey, the declared enemy of all induſtry, has hands too. The ſluggard, or ſloth, likewiſe has hands, and they ought to have ſuggeſted to him the propriety of fortifying himſelf: of digging, at leaſt, a retreat in the earth, for himſelf and for his poſterity, expoſed as they are to a thouſand accidents, by the ſlowneſs of their progreſſion. There are animals in abundance furniſhed with tools much more ingenious than hands, and which are not, for all that, a whit more intelligent. The gnat is furniſhed with a proboſcis, which is at once an awl proper for piercing the fleſh of animals, and a pump by which it ſucks out their blood. This proboſcis contains, beſides, a long ſaw, with which it opens the ſmall blood veſſels at the bottom of the wound which it has made. He is likewiſe provided with wings, to tranſport him wherever he pleaſes; a corſlet of eyes ſtudded round his little head, to ſee all the objects about him in every direction: talons ſo ſharp, that he can walk on poliſhed glaſs in a perpendicular direction; feet ſupplied with bruſhes for cleaning himſelf;

a plume of feathers on his forehead; and an inſtrument anſwering the purpoſe of a trumpet to proclaim his triumphs. He is an inhabitant of the Air, the Earth, and the Water, where he is born in form of a worm, and where, before he expires, the eggs which are to produce a future generation are depoſited.

With all theſe advantages, he frequently falls a prey to inſects ſmaller, and of a much inferior orginiſation. The ant which creeps only, and is furniſhed with no weapons except pincers, is formidable not to him only, but to animals of a much larger ſize, and even to quadrupeds. She knows what the united force of a multitude is capable of effecting; ſhe forms republics; ſhe lays up ſtore of proviſions; ſhe builds ſubterraneous cities; ſhe forms her attacks in regular military array; ſhe advances in columns, and ſometimes conſtrains Man himſelf, in hot countries, to ſurrender his habitation to her.

So far is the intelligence of any one animal from depending on the ſtructure of it's limbs, that their perfection is frequently, on the contrary, in the inverſe ratio of it's ſagacity, and appears to be a kind compenſation of Nature to make up a defect. To aſcribe the intelligence of Man to his hands, is to deduce the cauſe from the means, and talent from the tool with which it works. It is juſt as if I were to ſay, that *Le Sueur* is indebted for the happy native graces of his pictures to a pencil of ſable's hair, and that *Virgil* owes all the harmony of his verſes to a feather of the ſwan of Mantua.

It is ſtill more extravagant to maintain, that human reaſon depends on Climate, becauſe there are ſome ſhades of variety in manners and cuſtoms. The Turks cover their heads with turbans, and we cover ours with hats; they wear long flowing robes, and we dreſs in coats with ſhort ſkirts. In Portugal, ſays *Montagne*, they drink off the ſediment of wines, we throw it away. Other examples, which I could quote, are of ſimilar importance. To all this I anſwer, that we would act as theſe people, if we were in their country; and that they would act as we do, were they in ours.

Turbans and flowing robes are adapted to hot countries, where the head and body ſtand in need of being cooled, by incloſing in the covering of both a greater maſs of air. From this neceſſity has ariſen the uſe of turbans among the Turks, the Perſians, and Indians, of the mitres of the Arabians, of the bonnets like a ſugar loaf of the Chineſe and Siameſe, and that of wide and flowing

robes, worn by moſt of the Nations of the South. From a contrary neceſſity, the Nations of the North, as the Polanders, the Ruſſians, the Tarters, wear furred caps and cloſe garments. We are obliged to have, in our rainy Climates, three aqueducts upon our head, and garments ſhortened, becauſe of the dirt. The Portugueze drink the ſediment of wine; and ſo would we do with the wines in Portugal; for in ſweet wines, as thoſe of hot countries, the moſt ſugary particles are at the bottom of the caſk; and in ours, which are ſprightly, nothing is at the bottom but mere dregs, the beſt is uppermoſt. I have ſeen in Poland, where they drink great quantities of the wines of Hungary, the bottom of the bottle preſented as a mark of preference. Thus the very varieties of national cuſtoms prove the conſiſtency of human reaſon.

Climate has no greater influence in changing human morality, which is reaſon in perfection. I admit, at the ſame time, that extreme heat and cold produce an effect on the paſſions. I have even remarked, that the hotteſt days of Summer, and the coldeſt of Winter, were actually the ſeaſons of the year when moſt crimes were committed. The dog days, ſay the vulgar, is a ſeaſon of calamity. I could ſay as much of the month of January. I believe it muſt have been in conformity to theſe obſervations, that ancient Legiſlators had eſtabliſhed, for that critical period, feſtivals deſigned to diſſipate the melancholy of mankind, ſuch as the feaſt of Saturn among the Romans, and the feaſts of Kings among the Gauls. In each Nation the feſtival was adapted to the public taſte; among the Romans, it preſented the images of a republic; among our anceſtors thoſe of monarchy.

But I beg leave, likewiſe, to remark, that thoſe ſeaſons fertile in crimes, are the ſeaſons, too, of the moſt ſplendid actions. This effervescence of ſeaſon acts on our ſenſes, like that of wine. It produces in us an extraordinary impulſion, but indifferently to good and to evil. Beſides, Nature has implanted in our ſoul two powers, which ever balance each other in juſt proportion. When the phyſical ſenſe, Love, debaſes us, the moral ſentiment, Ambition, raiſes us up again. The equilibrium neceſſary to the empire of Virtue ſtill ſubſiſts, and it is never totally loſt, except in perſons with whom it has been deſtroyed by the habits of ſociety, and more frequently ſtill by thoſe of education. In that caſe, the predominant paſſion, having no longer any counterpoiſe, aſſumes the command of all our faculties; but this is

the fault of ſociety, which undergoes the puniſhment of it, and not that of Nature.

I remark, however, that theſe ſame ſeaſons exert their influence on the paſſions of Man, by acting only on his moral, and not on his phyſical principle. Though this reflection has ſomething of the air of paradox, I ſhall endeavour to ſupport it by a very remarkable obſervation. If the heat of Climate could act on the human body, it aſſuredly would be when one is in his mother's womb: for it then acts on that of all animals, whoſe expanſion it accelerates. Father *du Tertre*, in his excellent Hiſtory of the Antilles, ſays, that in thoſe iſlands, the period of geſtation of all European animals is ſhorter than in temperate Climates; and that the hen's eggs are not longer in hatching, than the ſeeds of the orange in burſting their ſhell, twenty three days. Pliny had obſerved in Italy, that they hatch in nineteen days in Summer, and in twenty five in Winter.

In every country, the temperature of Climate haſtens, or retards, the expanſion of all plants, and the geſtation of all animals, the Human Race excepted: let this be carefully remarked. "In the Antilles iſlands," ſays Father *du Tertre*, "the white women and the negreſſes go with child nine months, as in France." I have made the ſame remark in all the countries through which I have travelled, in the Iſle of France, under the Tropic of Capricorn, and in the extremity of Ruſſian Finland. This obſervation is of conſiderable importance. It demonſtrates that the body of Man is not ſubjected, in this reſpect, to the ſame laws with other animals. It manifeſts a moral intention in Nature, to preſerve an equilibrium in the population of Nations, which would have been deranged, had the pregnancy of the woman been of ſhorter duration in hot countries than in cold. This intention is farther manifeſted in the admirable proportion ſhe maintains in the production of the two ſexes, ſo nearly equal in number, and in the very difference which we find, of one country from another, between the number of males and females: for it is compenſated from North to South, in ſuch a manner, that if there be rather more women born to the South, there are rather more men born to the North; as if Nature meant to attract and to unite Nations, the moſt remote from each other, by intermarriages.

Climate has an influence on morality, but by no means determines it; and though this ſuppoſed determination may be conſidered, in many modern Books, as the fundamental baſis of the Legiſlation of Nations, there is no one philoſophical opinion

more completely refuted by hiſtoric teſtimony. "Liberty," ſay they, "has found her aſylum in the lofty mountains; from the North it was that the haughty conquerors of the World iſſued forth. In the ſouthern plains of Aſia, on the contrary, reign deſpotiſm, ſlavery, and all the political and moral vices which may be traced up to the loſs of liberty."

So then, we muſt go and regulate, by our barometers, and thermometers, the virtues and the happineſs of Nations! There is no neceſſity to leave Europe, in order to find a multitude of monarchical mountains, ſuch as thoſe of Savoy, a part of the Alps, of the Apennines, and the whole of the Pyreneans. We ſhall ſee, on the contrary, many republics in plains, ſuch as thoſe of Holland, of Venice, of Poland, and even of England. Beſides, each of thoſe territories has, by turns, made trial of different ſorts of government. Neither cold, nor ruggedneſs of ſoil, inſpire men with the energy of liberty, and ſtill leſs with the unjuſt ambition of encroaching on that of others. The peaſants of Ruſſia, of Poland, and of the cold mountains of Bohemia, have been ſlaves for many years paſt; whereas the Angrias and the Marattahs, are free men and tyrants in the South of India. There are ſeveral republics on the northern coaſt of Africa, where it is exceſſively hot. The Turks, who have laid hold of the fineſt provinces of Europe, iſſued from the mild climate of Aſia. The timidity of the Siameſe, and of moſt Aſiatics, has been quoted; but it is to be imputed, in thoſe Nations, to the multitude of their tyrants, rather than to the heat of their countries. The Macaſſars, who inhabit the iſland of Celebes, ſituated almoſt under the Line, are poſſeſſed of a courage ſo intrepid, as the gallant count *Forbin* relates, that a ſmall number of them, armed with poinards only, put to flight the whole force under his command, at Bancock, conſiſting of Siameſe and French, though the former were very numerous, and the others armed with muſkets and bayonets.

If from courage we make the tranſition to love, we ſhall find that climate has no more a determining power over Man, in the one caſe than in the other. I might refer myſelf, for proof of the exceſſes of this paſſion, to the teſtimony of travellers, to aſcertain which has the ſuperiority, in this reſpect, the Nations of the South, or thoſe of the North. In all countries love is a torrid Zone to the heart of Man. I muſt obſerve, that theſe appropriations of Love to the Nations of the South, and of courage, to the Nations of the North, have been imagined by our Philoſophers, as effects of climate, applicable only to foreign

nations: for they unite theſe two qualities, as effects of the ſame temperament, in thoſe of our heroes to whom they mean to pay their court. According to them, a Frenchman great in feats of love, is likewiſe great in feats of war; but this does not hold as to the other Nations. An Aſiatic, with his ſeraglio, is an effeminate coward; and a Ruſſian, or any other ſoldier of the North, whoſe courts give penſions, is a ſecond Mars. But all theſe diſtinctions of temperament, founded on climate, and ſo injurious to Mankind, vaniſh into air, before this ſimple queſtion: Are the turtle doves of Ruſſia leſs amorous than thoſe of Aſia; and are the tigers of Aſia leſs ferocious than the white bears of Nova Zembla?

Without going to ſeek among men objects of compariſon and contraſt, from difference of place, we ſhall find greater diverſity in manners, in opinions, in habiliments, nay, in phyſiognomy, between an opera actor and a capuchin friar, than there is between a Swede and a Chineſe. What a contraſt is the talkative, flattering, deceitful Greek, ſo fondly attached to life, to the ſilent, ſtately, honeſt Turk, ever devoted to death! Theſe men, ſo very oppoſite, are born, however, in the ſame cities, breath the ſame air, live on the ſame food. Their extraction, we ſhall be told, is not the ſame; for pride, among us, aſcribes a mighty influence to the power of blood. But the greateſt part of thoſe Janiſſaries, ſo formidable to the cowardly Greeks, are frequently their own children, whom they are obliged to give in tribute, and who paſs, by a regular proceſs, into this firſt corps of the Ottoman ſoldiery. The courteſans of India ſo voluptuous, and its penitents ſo auſtere, are they not of the ſame Nation, and, in many caſes, of the ſame family?

I beg leave to aſk, In what inſtance was an inclination to vice or virtue known to be communicated with the blood? *Pompey*, ſo noted for his generoſity, was the ſon of *Strabo*, infamouſly notorious to the Roman people for his avarice. The cruel *Domitian* was brother to the gracious *Titus*, *Caligula* and *Agrippina*, the mother of *Nero*, were, indeed, brother and ſiſter; but they were the children of *Germanicus*, the darling hope of Rome. The barbarous *Commodus* was ſon to the divine *Marcus Aurelius*. What a difference is frequently obſervable in the ſame man, between his youth and his mature age; between *Nero*, ſaluted as the Father of his country, when he mounted the throne; and *Nero* execrated as it's avowed enemy before his death: between *Titus*, ſtigmatized with the name of a ſecond *Nero*, in his youth, and *Titus* at his death, embalm-

ed with the tears of the Senate, of the Roman people, and of ſtrangers; and tranſmitted unanimouſly to poſterity as the delight of mankind?

It is not climate, then, which regulates the morality of Man; it is opinion, it is education: and ſuch is their power, that they triumph not only over latitudes, but even over temperament. *Ceſar*, ſo ambitious, ſo diſſolute; and *Cato*, ſo temperate and virtuous, were both of a ſickly conſtitution. Place, Climate, Nation, Family, Temperament, no one of theſe, and in no part of the World, determine men to vice or virtue. They are every where free to chooſe.

ON DOMESTIC ECONOMY.

BY THE MARQUIS D'ARGENSON.

IT is at preſent required of maſters and miſtreſſes of families, not to appear too much taken up with the care of doing the honours of their tables, &c. Nothing appears more ridiculous than to ſee the lady of the houſe torment herſelf, give her keys to ſervants to fetch different things ſhe has in her own particular keeping, which ſhe diſtributes, with circumſpection, on great occaſions; afterwards preſſing people to eat of what ſhe thinks good, as if they had it not in their power to have as good things ſet before them every day These manners are ſo impolite, provincial, and ruſtical, that they are even baniſhed from the genteel citizens houſes of Paris, from the provinces and chateaux. A houſe ſhould be ſo well regulated, that by a ſign, or a word, from the maſter or miſtreſs, every thing ſhould be in its place, and the company well ſerved. But if, in the courſe of the day, they ſhould be diſengaged from company, the miſtreſs ſhould reſerve to herſelf moments of recollection, in private with her ſervants, when ſhe ſhould reckon the expences of the

preceding day, and give her orders for the preſent and ſucceeding ones; ſhould know what every thing coſts, and what becomes of it. In houſes where maſters and miſtreſſes are too elevated to deſcend to theſe minutia, a truſty and faithful ſteward ought to be charged with it; but, as in a well managed theatre, the machinery and decorations ſhould be ſo well prepared as to make every thing appear at the moment of repreſentation, to be the effect of the ſtroke of a magic wand.

I know of a good citizen's houſe, the maſter of which is rich and eaſy, wherein the common order of things is reverſed. The lady commonly charges herſelf with the daily expences; there the contrary is the caſe; the miſtreſs of the houſe prides herſelf upon her wit; and one great means ſhe employs to gain a brilliant reputation is, to give regularly, on certain days, a dinner, on others a ſupper, to thoſe who have moſt wit and information. The fortune of her huſband is equal to theſe expences; he kindly gives into them with a good grace, and is as well pleaſed as the company with the elegance of her taſte. But, although he ſeems not to be intereſted in the diſſertations at which he is preſent, aſks no queſtions, and never ſays a word, I know, from good authority, that he amuſes himſelf with them. How do we know that he does not liſten as a critic; it is certain, that this man, who ſays not a word, except in helping his friends at table, in the moſt polite manner, who ſeems in the houſe, as an humble friend to the lady, and to give orders about any thing, ſpends all his morning in regulating the family expences, and writing out the bill of fare for dinner: he ſcolds his ſervants when they fail in the leaſt part of their duty, and preſcribes them preciſe and exact laws for the future; his people tremble before him; and he takes the liberty to reprimand his wife, when, by her fault, the expences are too great, or the dinner is not good enough.

There is nothing which a philoſophical obſerver may not turn to advantage; and this gentleman might find in the ſtudy of theſe little domeſtic affairs, an intereſt of conſiderable magnitude.

ABSTRACTS OF THE ABBE BERTHOLON's PAPER ON FIRES, AND THE MEANS OF EXTINGUISHING THEM.

PUBLISHED IN THE LAUSANNE MEMOIRS.

THIS ſubject is important and intereſting, although the Abbe has rather collected the obſervations and experiments made by others, than conveyed any new and original information. He aſcribes the inflammability of bodies to the inflammable gas which they contain, and which, on their decompoſition by heat, is let looſe, and coming into contact with the atmoſphere is ignited, and burſts out into flame. The principal part of the memoir is devoted to a detail of the means of preventing and extinguiſhing fires; and here the author's chief advice, which is "in the conſtruction of buildings, to employ as little as poſſible of thoſe materials which yield inflammable air on their decompoſition," will be allowed to be perfectly juſt in theory, but will probably be little followed in practice; nor is the ſecurity reſulting from brick floors likely to compenſate, in this age of affected elegance, for their appearance. He informs us, however, that M. Ango, an architect of Paris, has contrived a method of conſtructing a floor with iron bars, inſtead of timber joiſts, which is even leſs expenſive than the common mode. The wood uſed in buildings may be rendered uninflammable, by being ſtepped in a ſaline ſolution, and by being prepared with allum, even canvaſs and paper hangings may be made to burn without flame.

Many other precautions are mentioned by the Abbe, which we ſhall not detail, as they are univerſally known, and we believe pretty generally adopted. After deſcribing the inventions of Mr. Hartly and Lord Mahon, together with a preparation ſimilar to that of Lord Mahon's, recommended by M. Frederic, of Vienna, the Abbe gives an account of a ſubſtance, which he calls paper ſtone, invented by Dr. Faye, phyſician to the Swediſh admiralty: its compoſition is not known, but from a chemical

analyſis it appears to conſiſt of two parts of an earthy baſis, and one of animal oil, mixed up with two parts of ſome vegetable ſubſtance. At Carlſcrone a hut was built of dry wood, covered with this paper, which is not more than two lines in thickneſs, it was then filled with combuſtibles, which were ſet on fire and conſumed without burning the buildings; the paper, which had been paſted on boards, was reduced to a cinder, and formed a kind of incruſtation, which preſerved them from the effects of the flame. As this paper readily takes any colour, it may be rendered ornamental as well as uſeful.

In his directions for extinguiſhing fires, the Abbe obſerves that water, in which a ſmall quantity of potaſh has been diſſolved, is more efficacious than any other; he alſo recommends an engine called an hydraulic ventilator, invented by M. Caſtelli, which is worked by vanes inſtead of piſtons, and may be managed by one perſon. The advantages aſcribed by our author to this machine are very conſiderable, but we cannot ſuppreſs our aſtoniſhment on being told, that with a cylinder of only three inches in diameter, it will throw up more water than the largeſt fire engine; however, it certainly appears to be leſs expenſive and more portable than the common forcing pumps, and may be of uſe in extinguiſhing a fire, before it has made any great progreſs. The utility of garden mould with wet ſand in this reſpect, is well known, but it can ſeldom be applied, and we doubt the efficacy of the kind of catapulta which the author recommends, for throwing it to any diſtance.

The remainder of the memoir contains ſome very juſt and obvious remarks on the neceſſity of a regular diſcipline among firemen, and it concludes with a deſcription of the engines, ciſterns and pipes at the opera houſe in Paris, the conſtruction and arrangement of which the Abbe recommends to be adopted in every public theatre.

Remarkable inſtance of the great patience, under bodily pain, of the Indians inhabiting the banks of Oroonoko; from father Gumilla's account of that little known and extenſive country.

THE man who aſpires to the character of a hero in this country, begins by attaching to himſelf a certain number of men, whom he gains either by the reputation of his valour, or by the intereſt of his relations and friends. When his adherents amount to an hundred, he provides plenty of Chicha*, invites the caciques and captains of his nation, recites his exploits, and requeſts that he may undergo the *Trial*, in order to his being received a chief or captain. The judges having admitted his petition, place him naked in the middle of the room, and the eldeſt captain, with a well knotted whip, gives him a handſome number of laſhes at different times, the ceremony continuing till all the chiefs are ſucceſſively tired and ſpent with whipping the poor wretch. The caciques and all preſent keep profound ſilence during the operation, obſerving whether the candidate bears torture like a man of courage; for the ſlighteſt plaint is enough to oblige them to refuſe him their ſuffrages, and to exclude him from the two remaining trials. But if, without any ſign of impatience, and like a ſtatue, he endures this deluge of ſtripes, that flay him alive, and cover him with gaſhes, they are laviſh in their applauſes, and all get drunk with him in demonſtration of their joy. Thus ends the firſt trial.

But this, barbarous as it is, is nothing when compared to thoſe following. After the candidate has allowed himſelf ſome months for the healing of his lacerations; he provides the ſame quantity of Chicha, appoints a day, and the chiefs being met, he is put naked into a cotton hammock ſuſpended between two trees, the hammock wrapt round him, and bound with three cords, one at each end, and one in the middle: then the captains open a little the two ends of the hammock, and blow into it, through a hollow cane, ſome thouſands of the large piſmires of this country, whoſe bite is ſuch, that when you would pull them

* An intoxicating liqour.

off, they will ſooner leave their heads than let go their hold. Thus he lies in the midſt of five or ſix thouſand piſmires, who gnaw his fleſh on all ſides, without his being able to avoid them, or even to turn or ſtir; for the formality of his trial requires perfect ſtillneſs, and its good or bad iſſue depends on that, or on a ſingle motion, manifeſting his impatience of the pain theſe devouring vermin give him. And if by chance there ſhould be the leaſt ſign of it eſcape him, when they bite the eyelids, or other delicate parts of the body, his cauſe is loſt, his trial turns to his ſhame, and he is rendered incapable of obtaining the rank of captain. But on the contrary, if he ſuffers with courage during the time preſcribed by their law, they congratulate him, and haſten to deliver him from the inſects that cover him from head to foot; this is done by means of an ointment, which obliges them to let go their hold: then all go to drinking till they can drink no more; for thus commonly they finiſh their aſſemblies on great affairs.

The third proof, which we may call *infernal*, is made in the manner following. The chiefs being met, a hurdle or a kind of wooden gridiron, is fixed about an ell from the ground, ſufficiently large and ſtrong to receive the body of a man. On this they lay ſome plantain leaves, which are about an ell long and half an ell wide. The candidate places himſelf on this couch, or rather ſcaffold, lying on his back, putting into his mouth a hollow cane, which is to ſerve him in breathing: then they cover him entirely and cloſely with plantain leaves, obſerving to pierce thoſe that are over his head, ſo that his cane may paſs through them. A fire is then kindled under him, ſo ordered that the flame ſhall not reach the grate, but may give heat enough to *broil* this ignorant victim. Some, appointed for that purpoſe, are employed in augmenting or diminiſhing the fire, that it may neither fall ſhort of, or exceed, the degree preſcribed by the law, while others obſerve with care, whether the patient moves or not, the leaſt motion being ſufficient to exclude him for ever from the ſtation he aims at. Others are placed near the cane, to obſerve if his breathing is ſtrong or weak; and when the time of trial is expired, they immediately remove the covering: if the candidate is found dead, he is lamented with tears and cries by the whole aſſembly; but if living, the woods reſound with their acclamations; they felicitate him, drink his health, and hold his valour ſufficiently proved.

FENELON.

EVERY man of worth and of literature muſt grieve that there has been no good life of this excellent prelate yet publiſhed; that written by the Chevalier Ramſay is a trifling performance, and compoſed with none of that enthuſiaſm which one would have thought the living familiarly with this great prelate would have produced, and which made Lord Peterboro' cry out, when he had only paſſed a few days with him at his palace at Cambray, "If I ſtay here two days longer, I ſhall become a chriſtian in ſpite of myſelf." His famous book, the Maxims of the Saints, was condemned by the pope, who was ſtill, however, ſo much impreſt by the purity of the prelate's character who compoſed it, that he wrote to ſome of his brethren who were in oppoſition to him—"Hic peccavit exceſſu amoris divini, ſed vos pecciſtis defectu amoris proximi." Fenelon ſo completely ſubmitted to the pope's deciſion, that from his own pulpit, at Cambray, he denounced his own book as heretical, and as having deſervedly incurred the cenſure of the head of the catholic church; and made a preſent to the ſociety of the church of Cambray of a magnificent caſe for the conſecrated wafer, emboſſed in gold, and ſupported by two angels, one of which is trampling under his feet ſome heretical books; amongſt them is one with this title, "Maximes des Saints." The Duke of Marlborough uſed to give his officers a particular charge never to do any miſchief to the eſtates of the archbiſhop of Cambray. He is buried in his own cathedral, where his family have erected to him a monument.

Drevet's famous print of Fenelon is the beſt commentary upon the Duke of Saint Simon's deſcription of this excellent prelate. The eyes appear to ſtrike with ſacred fire. His directions for the conſcience of a king was written for his dear pupil, the Duke of Burgundy; and, from the good ſenſe, and the ſound morals with which it abounds, might be recommended to the peruſal of every ſovereign. His treatiſe on the education of young women is excellent, and written with that elegance and ſimplicity of ſtyle, which in general characteriſe the writings of Fene-

lon. When the Duke of Burgundy was on his way to take the command of the French army, he paſſed through Cambray, and paid a viſit to Fenelon, who was then in diſgrace with Louis XIV. On parting, he took him by the hand, and ſaid, "Je ſais ce que je vous dois, and vous ſavez ce que je vous ſuis."

DESCRIPTION OF A METHOD OF INCREASING POTATOES, IN A LETTER FROM MR. JOHN LOCKETT, OF DONNINGTON, TO MR. MOORE.

[From the Thirteenth Volume of the Tranſactions of the Society inſtituted at London, for the Encouragement of Arts, and Manufactures, and Commerce.]

"SIR,

"HAVING lately ſeen in the news papers, various methods propoſed in order to increaſe and multiply potatoes in the moſt effectual manner, I take the liberty of ſending you an experiment which I have repeatedly made; alſo a method to procure plants in a very cheap and eaſy way; not after ſuch as the preſent winter, but after a mild winter, when the froſt has penetrated but a ſmall diſtance below the ſurface of the ground.

Firſt, as to the experiment; I took three potatoes, the 17th December, 1793, and put them in a ſmall caſk, and placed the caſk in a cellar: the 10th of March, I took off fifteen ſhoots from them, and planted them with a ſetting or dibbling ſtick, in the ſame manner as cabbage plants, about one foot ſquare; the 16th of April, I took twenty one more ſhoots from the ſame three potatoes, and planted them as before: on the 22nd of May, I took twenty five ſhoots more, and planted them alſo, and then waſhed and boiled the ſaid three potatoes, which prov-

ed very good to eat. I had from the ſaid ſixty one ſhoots, as many potatoes as weighed ninety two pounds, notwithſtanding the rooks did me much damage.

" My method of procuring plants after a mild winter, is to go (about the month of May) over the fields where potatoes were planted the preceding year, and pull up from among the corn all the ſhoots produced by the potatoes left in the ground the preceding autumn, which had eſcaped the digger; and plant theſe ſhoots in the ſame manner as above, viz. the ſame as cabbage plants.

I am,
Sir,
Your very humble ſervant,
JOHN LOCKETT."

Dennington, March 1, 1795.
MR. MOORE.

ANECDOTES.

DR. South, one of the chaplains of Charles the Second, preaching on a certain day before the court, which was compoſed of the moſt profligate and diſſipated men in the nation, perceived in the middle of his diſcourſe, that ſleep had gradually taken poſſeſſion of his hearers. The doctor immediately ſtopped ſhort, and changing his tone of voice, called out to Lord Lauderdale three times. His lordſhip ſtanding up. "My Lord," ſays South, with great compoſure, "I am ſorry to interrupt your repoſe, but muſt beg you that you will not ſnore quite ſo loud, leſt you awaken his Majeſty."

Charles the Fifth having one day approached very near to a battery of cannon, one of his officers begged him not to expoſe his perſon in that manner; upon which the Emperor ſmiling, ſaid, " Did you ever ſee a bullet hit an Emperor?"

POETRY.

EULOGIUM,

By the GENIUS of the EAST, or SIR WILLIAM JONES.

[From Mr. Maurice's Elegiac and Hiſtorical Poem, ſacred to the Memory and Virtues of the Honorable Sir William Jones.]

TO chaſe the tenfold gloom, my Jones was thine,
To cheer the Brahmin, and to burſt his chains;
To ſearch for latent gems the Sanſcreet mine,
And wake the fervour of her ancient ſtrains.

For, oh! what pen ſhall paint with half thy fire,
The power of muſic on the impaſſion'd ſoul,
When the great maſters waked the Indian lyre,
And bade the burning ſong electric roll?

The myſtic veil, that wraps the hallow'd ſhrines
Of India's deities, 'twas thine to rend:
With brighter fires each radiant altar ſhines,
To nature's awful God thoſe fires aſcend.

Sound the deep conch; dread Veeſhnu's power proclaim,
And heap with fragrant woods the blazing urn;
I ſee ſublime devotion's nobleſt flame
'Midſt ſuperſtition's glowing embers burn!

'Twas thine, with daring wing, and eagle eye,
To pierce antiquity's profoundeſt gloom;
To ſearch the dazzling records of the ſky,
And bid the ſtars the ſacred page illume.

Nor did the inſtructive orbs of heaven, alone,
Abſorb thy ſoul 'mid yon ethereal fields;
To thee the vegetable world was known,
And all the blooming tribes the garden yields;

From the tall cedar on the mountain's brow,
Which the fierce tropic ſtorm in vain aſſails,
Down to the humbleſt ſhrubs that beauteous blow,
And ſcent the air of Aſia's fragrant vales.

But talents—fancy—ardent, bold, ſublime—
Unbounded ſcience—form'd thy meaneſt fame;
Beyond the graſp of death, the bound of time,
On wings of fire religion wafts thy name.

And long as ſtars ſhall ſhine, or planet roll,
To kindred virtue ſhall that name be dear!
Still ſhall thy genius charm the aſpiring ſoul,
And diſtant ages kindle at thy bier.

TRANSLATION OF A HYMN,

Written by La Source and Sillery, and ſung by them every Night, when impriſoned in the Luxembourg, and in expectation of Death.

[From Miſs WILLIAMS's Sketch of the Politics of France, from the 31ſt of May, 1793, till the 28th of July, 1794. Vol. I.]

CALM all the tumults that invade
Our ſouls, and lend thy pow'rful aid,
O ſource of mercy! ſoothe our pains,

And break, O break, our cruel chains!
To thee the captive pours his cry,
To thee the mourner loves to fly;
The incenſe of our tears receive,
'Tis all the incenſe we can give.
Eternal Pow'r, our cauſe defend,
O God of Innocence the friend!
Near thee for ever ſhe reſides,
In thee for ever ſhe confides.
Thou know'ſt the ſecrets of the breaſt,
Do thou our wrongs with pity ſee,
Avert a doom offending Thee:
But, ſhould the murderer's arm prevail,
Should tyranny our lives aſſail,
Unmov'd, triumphant, ſcorning death,
We'll bleſs Thee with our lateſt breath.
The hour, the glorious hour will come,
That conſecrates, the patriot's tomb:
And, with the pang our mem'ry claims,
Our country will avenge our names.

A SAILOR's DESCRIPTION

OF A MASQUERADE.

LITTLE Moll, faith, and I from Wapping came up,
To ſee the fine ſhew and the folks:
But for fear of miſtakes we thought beſt for to ſup,—
For theſe courtiers have comical jokes.

When firſt we came in, I was maz'd to behold,
Night at once was all chang'd into day;
The folks ſeem'd to roll like a vaſt ſea of gold,
And the gall'ry ſtuff'd full like a play.

Little Moll dropt aſtern, being afraid to make ſail,
'Till I at her helm took a ſpell;

When whip in a trice ſhe ſteer'd up within hale
Of tke Devil, juſt landed from Hell.

Lord bleſs me, ſays ſhe, Ben! why where have we gt!
This company s too good for we?
Sure at home he was cold, and's come here to be hot,
For ſuch Devils I never did ſee!

The Devil! ne'er mind—heave-a-head, my dear girl,
And I'll ſhew you the king of the crew;
Each duke, ev'ry dutcheſs——each lady and earl:
And when I bumb——do you courtſy——do I

Like a tragedy Queen, when Moll ſaw the King,
Plump on her bare knees ſhe fell down;
But, by Neptune, I ſoon made her riſe with a ſpring,
And ſwore ſhe knew nought of the town.

We parted—and I, faith, who love to be ſmart,
Clapp'd on board of a ſhepherdeſs ſweet,
Who, with no other crook than her eyes hook'd my heart
As faſt as if preſt in the fleet.

She pull'd me about (till parch'd was my mouth)
At the rate of ten knots by the log:
But I ſoon found this king was no tar—but a youth,
For he burgundy gave us as grog.

This gay little ſhepherdeſs, faith, was ſo ſmart,
She tow'd me from pillar to poſt;
Some call'd me a lubber, unfit for my part,
And reck'd on the maſquerade coaſt.

Mandarins and Nabobs were as plenty as rice,
Jews, Negroes, Banyans, and what not?
There were characters, purchas'd at ev'ry price,
Unleſs the raw, bra, letter'd Scot.

In this ocean of pleaſures, egad, there were tars
Who ne'er paſt the buoy of the Nore;
There were ſoldiers like Hymen, who knew not of wars,
And domino fools by the ſcore.

There were pilgrims and quakers, blacks, witches, and nuns,
Minervas without ſenſe or tongue,
Who falter'd and liſp'd out ſome feminine puns:
"Do you know me;"—was all—ſaid or ſung.

Grave conjurors too, who ne'er conjur'd before,
And harlequins, heavy as droſs.
Mild Night too, who long ſhone the ſun of this ſhore,
But ſet in the fair Mrs. Roſs.

Old wives were at once to dull gen'rals turn'd,
And Tancred, in ſorrowful ſtrain,
Wept Phillips's wrongs—and then inſtantly burn'd
For Diana from lewd Drury-lane.

There was ſupper they ſaid—we got nothing to eat:
Here a fort, there a town, here St. Paul;
But all cramm'd, as at ſhort allowance of meat,
Gorging garriſons, gardens, and all.

By ſtrange kitchen alchymy, ev'ry diſh
Seem'd tranſmuted for Epicure Mammon;
There was fiſhified fleſh, and fleſhified fiſh:
A calfs-head ſeem'd a fine jole of ſalmon.

When I thought I took one thing, another I got;
The French cook ſo well knew his trade,
That ev'ry thing look'd like what it was not,
And the diſhes were all Maſquerade.

There were none loſt their wit, there were ſome loſt their (ſweat
In ſhort, 'twas all Hebrew to me;
So my anchor I tripp'd with my kind little Bet,
And paid Moll with a top-ſail at ſea.

ON SUICIDE.

A THOUGHT FROM MARTIAL.

I.

WHEN fate in angry mood has frown'd,
And gather'd all her ſtorms around,
The ſturdy Romans cry,
The great, who'd be releas'd from pain,
Falls on his ſword, or opens a vein,
And bravely dares to die.

II.

But know; beneath life's heavy load,
In ſharp affliction's thorny road,
'Midſt thouſand ills that grieve,
Where dangers threaten, cares infeſt,
Where friends forſake, and foes moleſt,
'Tis braver far to live.

VERSES SENT TO A LADY ON HER BIRTH-DAY.

IN the gay ſeaſon of ingenuous youth,
While inborn honour points the road to truth,
And the firſt hopes are to be lov'd and wiſe:
Oh may each fragrance of life's ſpring be thine,
And the rich harveſt of content divine!
A taſte ſuperior, the ſublime of mind,
All ſofter feelings, delicate as kind;
Paſſions obedient to the laws of ſenſe,
And all the tranſports of benevolence.

But when the bleſſings of thy MORN decay,
And thou ſhalt reach the NOON of human day;
May ſober Reaſon guide thy gentle heart;
Still to perform with grace the important part;
Haply thy babes ſhall catch that grace of thee
(Thoſe living pictures of thyſelf and me)
The modeſt miniatures ſhall liſp thy worth,
And often help their ſire to bleſs thy birth.

At laſt, when Age exterior bloom decays,
And in thy forehead Time his track diſplays;
When Heaven with envy views my happy ſtate,
And courts thy ſpirit to a nobler fate;
When Health's ripe roſes on thy cheek ſhall die,
And Sickneſs cloud the ſummer in thine eye,
May ſacred Virtue ſoothe thy Chriſtian mind,
Calm in decay, and vigorous though reſign'd;
Clear to their ebb may all thy pleaſures flow,
And ſmile like evening ſun-beams as they go;
Then late, long honour'd, may thy ſpirit fly,
And angels hail it welcome to the ſky.

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